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DEVELOPMENT IN EAST LONDON

FOR close on a century now the riverside boroughs of Poplar and Stepney in the East End of London have constituted in themselves a major social problem. These localities were fully urbanised long before what are now the inner suburbs of the capital came into being, so that subsequent improvements in general standards of housing were denied them; nevertheless, the little rows of terraced cottages in the dockland streets, undesirable and substandard though they may have become in more recent times, fulfilled in their day a useful purpose in providing accommodation for those artisans who worked on the near-by waterfront. If those little cottages outlived their day it is no more than a tribute to the firms and their employees who were engaged to build them.

The damage caused by the war has, to some extent, simplified the task of replacing these outdated dwellings, but for several years before 1939 work had proceeded on slum clearance and the building of new blocks of flats. These pre-war operations, admirable in themselves, were little more than piecemeal in nature, however, for the projects lacked that coherence which we now recognise to be a first principle of redevelopment work of this kind. Thus, right until 1939, the boroughs of Poplar and Stepney remained a problem the extent of which only social workers, the police authorities and those few individuals who concerned themselves with securing a fuller and more useful life for those in less fortunate circumstances had anything more than an inkling.

In 1943, the County of London Plan, prepared by Mr. J. H. Forshaw, F.R.I.B.A., and Sir Patrick Abercrombie, was published by the London County Council. This document gave proposals for rebuilding as one comprehensive whole areas within the county which suffered extensive war damage. The Stepney-Poplar area, comprising a total of 1,945 acres, qualified for redevelopment in this respect, and a plan has been prepared by the London County Council for the construction in this part of London of a series of eleven neighbourhoods of from 5,500 to 11,000 inhabitants, each self-contained with its own amenities and public buildings.

The proposals in respect of Lansbury, the first of these neighbourhoods to be built, are illustrated and described at length elsewhere in this issue, and none will quarrel with the excellent designs prepared by the official and private architects engaged on the work. This scheme represents a decisive step forward in the redevelopment of our war-damaged or worn-out urban areas. The various buildings, domestic and otherwise, grouped round closes and open spaces of different sizes and character and built in the London stocks and purple-grey slates traditional to this part of London, will combine to give that integrated relationship which development between the wars sadly lacked. Through the years East Londoners have earned a world-wide reputation for their ability to make the best of a bad job; now, it seems, they will soon have the opportunity to make the best of a good one, and we do not doubt that they will take it.

THIS WEEK'S NEWS

PAGE

THE BRITISH ARCHITECTS' CONFERENCE, 1950, took place at Bristol and Bath from June 7 to 10. Reports of the paper read by the Hon. Lionel Brett, M.A., A.R.I.B.A., on "The City Centres of Europe" and of the Conference dinner appear on page 814. *A diary of the principal events at the Conference is given on page* 799

DETAILS HAVE BEEN ANNOUNCED of the buildings, including dwellings of various types, schools, churches, an old people's home and a market place, to be erected in the Lansbury Neighbourhood Unit, Poplar, in the Stepney-Poplar Reconstruction Area. Several of the buildings proposed will form a "Live" Architecture Exhibition for the Festival of Britain, 1951. 800

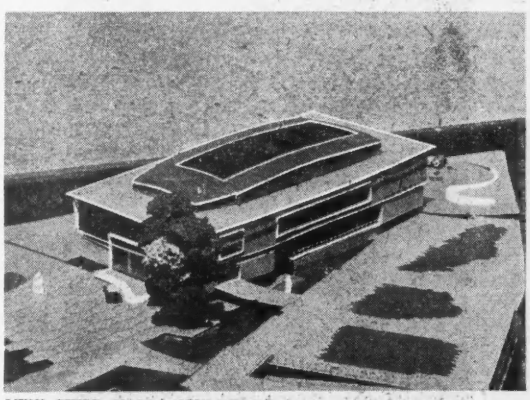
QUALIFIED STUDENTS OF ARCHITECTURE who wish to take an advanced course of training comprising an intensive study of civic architecture and the preparation of designs for buildings of national importance, are invited to apply to the Secretary, Royal Academy of Arts. 813

IT IS EXPECTED that Mr. Frank Lloyd Wright, the American architect, will distribute the prizes and studentships at the A.A. School of Architecture on July 14. 813

THE VIEWS OF SEVERAL PEOPLE, including architects and operatives, on the subject of productivity in the building industry were given at the first public meeting held in London, at which members of the Anglo-American Productivity Team were the principal speakers. The Minister of Works, Mr. Richard Stokes, who presided at the meeting, spoke of the importance of pooling ideas and "know-how" in manufacturing processes. 818

THE SUGGESTION that all restrictions be removed from houses built up to a cost of £1,500, provided that not more than 1½ standards of timber are used per house, was made by Mr. R. R. Costain, C.B.E., President of the L.M.B.A., when he spoke on the subject of house-building costs at a Conference at Brighton arranged by the Housing Centre. 819

THE THIRD STAGE ADJUSTMENT of the rates of wages for labourers in the building industry will come into operation on July 3 next. Details are given on page 824



NEW CIVIC HALL, GUILDFORD. A model of the winning design by Leonard F. Richards, A.R.I.B.A., A.M.T.P.I., and Charles W. H. Wright in the recent competition for a new Civic Hall at Guildford.

This portion "reads on" to the right-hand side of the upper photograph.

This portion "reads on" to the left-hand side of the upper photograph.

A photograph taken on Thursday, June 8, in the grounds of Blaize Castle, Bristol, of the British Architects' Conference, 1950

BRITISH ARCHITECTS' CONFERENCE

A Diary of Events

SO far, at least, as the British Architects' Conference, 1950, is concerned, the Bristol Society of Architects can look back on their Centenary year with unqualified pride and satisfaction. Nearly 650 members and their guests made the journey to the West Country for this year's event, and the warmth and geniality of the welcome extended to them could not have been surpassed anywhere. The smiling friendliness of Bristolians, architects and laymen alike, splendid weather and the care and forethought which attended the organisation of every part of the programme combined to make the occasion memorable for all who attended.

Wednesday, June 7. Towards late afternoon the invasion of Bristol was well under way, and from Temple Meads Station delegates made their way via the city centre and College Green to Park-row, where at Red Lodge Conference Headquarters, badges and information, etc., were awaiting collection. Those making the journey by road had a foretaste of the flawless organisation which attended every activity at the Conference, for the familiar yellow signs of the A.A. made the last lap of the journey from the City outskirts to the doors of Red Lodge a comparatively simple affair.

In the evening members were the guests of the Bristol Society of Architects at an informal reception at Red Lodge, when a short address of welcome was made by Mr. R. S. Redwood, A.R.I.B.A., the Society's President, and an enjoyable evening spent in making new friendships and renewing old ones. Later, after some excellent refreshments partaken in the cool shade of the garden adjoining the Wigwam, the headquarters of the Bristol Savage Club, kindly loaned for the occasion, a number made the short journey across to 25, Gt. George-street, where an exhibition of work done by students of the R.W.A. School of Architecture in their spare time was on view. Of particular interest in the exhibition were an eighth-scale model, mounted on linoleum, of a country house, by J. B. Hitchings, a Fourth Year student (a pity there was no accompanying plan), and a design prepared by Michael Edmonds, a Third Year student, for a house for an author.

At the far end of the exhibition a dark brown bottle, suitably inscribed, indicated the general direction of the next port of call and it was quite late before many members arrived back at their hotels.

Thursday, June 8. In the morning the inaugural meeting was held at the Physics Lecture Theatre, Bristol University, when a reception and address of welcome to members was given by the Lord Mayor of Bristol. The occasion provided the President of the Royal Institute, Mr. Michael Waterhouse, M.C., with the opportunity to express thanks and gratitude to the President and members of the Bristol Society for acting as hosts to the Conference members. The President referred particularly to the hard work of the Conference Executive Committee and also to the Honorary Secretary and Secretary of the Bristol Society, Mr. Clarke and Miss Murphy. These remarks were received with marked approbation, and there were none who could agree with the President when he said that he was the indigestible part of the sandwich between the Lord Mayor's address of welcome and the lecture they were to hear from Lord Rosse.

The paper read by Lord Rosse on "The Protection and Preservation of Historic Buildings" was, in fact, an admirable exposition of a problem with which most local authorities and not a few individuals are faced today, and one could not help but think how fortunate were the members of the Georgian Group to have as their chairman a man so acutely aware of the æsthetic and practical issues involved in that problem. His suggestion that this country should follow the example set by Continental countries and accept the principle of State aid in the matter of costs of repairs or improvements to historic buildings was well received, but there were several who, in the ensuing discussion, voiced in unmistakable terms their deprecation of any attempt to use other materials than natural stone in carrying out such of that work as required stone.

The afternoon saw Conference members assembled on the lawns at Blaize Castle for the Conference photograph, after which tea, to mention nothing of delectable ice-cream, was served from quite the largest marquee most of the assembled company had ever set eyes upon.

Blaize, with its broad lawns and well-wooded slopes, provided the ideal setting for this colourful and happy occasion, and it was not surprising that only a few visited the adjoining mansion to inspect the superb collection of traditional West Country domestic and industrial tools and equipment.

The Pump Room, Bath, provided a magnificent venue for the reception and dance held in the evening. Coloured lights were reflected a thousand times in the waters of the baths and springs, and rarely could those noble walls have witnessed a more gay and enchanting scene. Those who found the dance floor a little too strenuous found ample to interest them in an adjoining room, where an exhibition of photographs, "100 Years of Architecture in Wessex," was arranged. It was quite late when the last guests departed for Bristol, and there were many who had cause for thankfulness that the worthy bobbies of Bath had been smitten with temporary blindness for the evening and had failed to notice dozens of cars without lights in the side streets about the Pump Room.

Friday, June 9. Despite the brilliant sunshine and the attractions of the surrounding countryside offered by the whole-day tours arranged to the Cotswolds, Wells and Lacock, there was a full muster at the Physics Lecture Theatre in the morning to hear the Hon. Lionel Brett read his paper on "The New City Centres of Europe." It semed rather a pity that the discussion which followed, although launched in admirable style by Mr. R. E. Enthoven and Mr. Anthony Mealand, who proposed and seconded the vote of thanks, was not more prolonged than it was. However, the author had covered the subject so meticulously and eruditely and provided so many excellent lantern slides to illustrate his remarks that, as one eminent town planner afterwards pointed out, further comment seemed superfluous.

In the afternoon members divided into separate parties and left Bristol by coach to visit Bath, the Brabazon hangar at Filton, and Prior Park. A blazing sun shone from a cloudless sky, but so interesting and enthusiastic did the guides prove themselves to be on their various subjects that the afternoon ended all too quickly. We were of the party who made the now familiar journey to Bath and, under the well-informed guidance of Messrs. E. F. Trew, W. Sydie Dakers, A. Crozier-Cole, and D. W. Oliver and Mrs. Gerrard, spent all too brief a time touring this ancient and enthralling city. Later in the afternoon we were honoured to be the guests of Mr. E. F. Trew for tea, served in the garden of his home in Lansdown Place—a garden which must surely be among the most delightful and charming in the West Country.

A report of the Conference dinner held in the evening at the Queen's Hall, Bristol, appears elsewhere in these columns. The evening was a memorable one in many ways. The gay floral decorations, the shaded candles on the tables and the excellent meal which followed were a worthy prelude to a series of some of the finest and wittiest after-dinner speeches associated with such occasions as this of the Royal Institute. At the close of the last speech the toastmaster informed the company of the termination of the formal programme, a piece of information the point of which was not lost upon those who assembled at certain premises in Gt. George-street already referred to in this chronicle, where informality and conviviality culminated a thoroughly enjoyable evening.

Saturday, June 10. The lateness ot the festivities the night before in no way affected the numbers who assembled in the morning for tours to Messrs. E. S. and A. Robinson's prestressed concrete building, Bristol, Burrington Combe and Cheddar, and Clifton. Here, as on other tours arranged throughout the Conference the guides were well chosen and there were many loth to return to their hotels at the end of the morning.

And so there came to an end the British Architects' Conference, 1950, at Bristol and Bath. In the afternoon, in sunshine which had been hardly absent throughout the three days of the Conference, the members began to disperse. A party of about 100 or so remained to take advantage of reserved seats in the "parterre" at the Theatre Royal, Bristol, to see the Bristol Old Vic Company play "Tartuffe." After the performance the party was conducted over the theatre, including back-stage, by Mr. J. Ralph Edwards. Whether they left early or late, however, no Conference member left Bristol and Bath without regret. The three days were memorable ones and, to take up the mixed metaphor pronounced by Mr. Redwood in his address of welcome, the machinery had indeed been well set up and had borne excellent fruit.

COMING EVENTS

Monday, June 19.

BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION.—Electric Power Convention Exhibition. Harrogate. Continuing until June 24.

Tuesday, June 20.

HOUSING CENTRE TRUST.—Mr. L. E. White on "Neighbourhood Planning." 13, Suffolk-street, Haymarket, S.W.1. 1.15 p.m.

CHADWICK TRUST.—"The Engineer in Public Health," by Professor Gordon M. Fair, F.S.A. The Royal Sanitary Institute, 90, Buckingham Palace-road, S.W.1. 2.30 p.m.

ARTS COUNCIL OF GREAT BRITAIN.—Exhibition, "William and Mary and Their Time." Victoria and Albert Museum, South Kensington. 2.46 p.m. Continuing until August 20 (10 p.m. to 6 p.m. weekdays; 2.30 p.m. to 6 p.m. Sundays).

Thursday, June 22.

L.M.B.A.—Cricket with Blue Circle Sports Club, Snaresbrook.

Saturday, June 24.

INSTITUTE OF QUANTITY SURVEYORS.—A.G.M. Kent Room, Caxton Hall, Caxton-street, S.W.1. 2.30 p.m.

Development of Lansbury Neighbourhood Unit, Poplar

"LIVE ARCHITECTURE" EXHIBIT FOR FESTIVAL OF BRITAIN

THE LONDON COUNTY COUNCIL is reconstructing, under powers given by the Town and Country Planning Act, 1947, a war-damaged and derelict area of about 30 acres on the north side of East India Dock-road, Poplar, between Stainsby-road and Chrisp-street. This work, the first part of a new neighbourhood of about 110 acres, recently named Lansbury, marks the beginning of the Council's long-term scheme for the comprehensive redevelopment of the Stepney/Poplar Reconstruction Area. It will be on show as a "Live Architecture" exhibit for the Festival of Britain, 1951.

THE general planning, the architectural co-ordination of the scheme and the progress of work are under the direction of the Architect to the Council, Mr. Robert H. Matthew, A.R.I.B.A. The planning research has been carried out and the general plan for the neighbourhood as a whole and the layout for this first section of 30 acres have been prepared in the Town Planning Division of the L.C.C. Architect's Department.

Details of the various works now in hand and the architects responsible for them are given on the block plan and in the key reference on the facing page.

The Architect to the Council is also responsible for the design of a comprehensive Health Centre and for its construction at a later date on a site reserved in Lansbury. For the time being, the Minister of Health is not prepared to permit the Council to commence building the Health Centre. The architects appointed by private bodies responsible for other developments in the area are voluntarily co-operating with the Council to ensure a unified plan for the whole scheme.

The Reconstruction Area covers an area of 1,945 acres and has been replanned as a series of 11 neighbourhoods, generally varying in size from 5,500 to 11,000 people, each as far as possible with its own schools, local shopping centres, open spaces and community buildings.

During the war the area suffered very heavy damage from bombing. As a result the population fell to less than half of the pre-war figure, although it has risen slightly since. It was obviously desirable to keep it down as far as possible to avoid the pre-war congestion, overcrowding and lack of amenities. In view of the general problem of decentralisation in London as a whole it was felt that a reduction to 42 per cent. of the pre-war population of the reconstruction area was the maximum which could be achieved. This degree of decentralisation corresponds to a density of 136 persons per acre and this is the target density for all the neighbourhoods in the Reconstruction Area, including Lansbury.

Lansbury is the north-westernmost of a group of three neighbourhoods which comprise the community of Poplar. It is bounded by a canal—the Limehouse Cut—a main road—the East India Dock-road—and a railway—the line to the West India Docks. Between them lies an area of about 124 acres which will eventually house 9,500 people.

Zoning Pattern.

It was decided to maintain the existing concentration of industry along the Limehouse Cut which carried waterborne transport from the docks. The existing industry to the west of the railway was also retained and a small local industrial zone for service industry placed between it and the shopping area of Chrisp-street.

The main shopping centre of Chrisp-street, which is located in the south-east corner of the neighbourhood, is centrally placed in the Poplar Community and serves all three neighbourhoods. Its size, therefore, is related to the community rather than the neighbourhood. It has been made more compact and the existing scattered shops in other parts of the neighbourhood have been grouped into smaller local shopping centres.

The general disposition of open space was affected partly by the positions of other open spaces in adjoining neighbourhoods and partly by the presence of extensive areas of war-damaged land. A large area of future open space which otherwise might well have been covered by permanent buildings was safeguarded by using it for temporary hutments and prefabs.

This area, covering 15 acres, is to be the neighbourhood open space, with playing fields, tennis courts, bowling greens and other attractions. It was decided to link this by a system of parkways running through the neighbourhood to the market place and a smaller amenity open space on East India Dock-road.

The Chrisp-street market was found to be an unusually popular example of the kind of street market which flourishes all over London. It was obviously desirable to ensure that any replanning would not reduce its popularity, but, on the contrary, improve it, and make it a pleasanter place to shop in.

The shopping habits of the public were studied both by direct contact with the street traders and by discussion with the Market Inspector and the other Borough Engineer's staff responsible. It was necessary to study the hour-by-hour functioning of the market in some detail, including such things as the grouping of the various commodities and the method of hiring and garaging the stalls, the method of dealing with refuse and the transport and storage of the street traders' merchandise.

It was decided to provide positions for 150 stalls in the new market place, including 48 covered stalls. Thirty-seven new permanent shops will be provided in the first stage of reconstruction together with 16 temporary shops, the architect for the latter being Mr. W. J. Durnford, Senior Architect, L.C.C. Architect's Department. Many of these will accommodate shopkeepers who will be disturbed in the second stage.

Study of the traditional form of English market place was made, and after a number of different solutions had been tried it was decided to replace the street market with a market square with stalls in the centre and shops all round. A small covered market was provided at the request of the Ministry of Food, who were anxious that food be protected from dust and the weather and that the opportunity of providing cold storage for the more perishable commodities should be available.

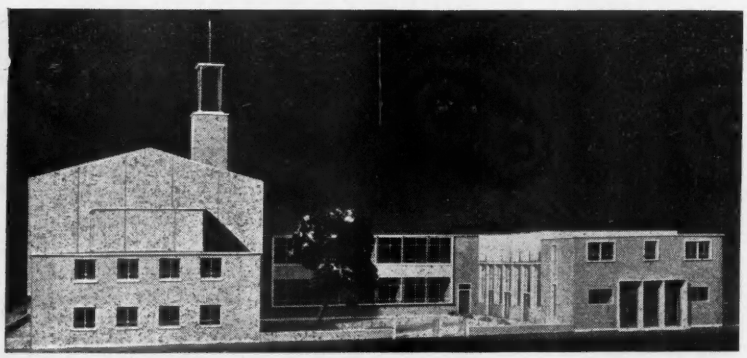
The layout of the market also provides for two public houses, a café, a kiosk, public conveniences and a small garden with seats. There is also a clock tower to add interest to the market place and provide a dominating feature which can be seen from many parts of the neighbourhood.

The traders were in full agreement with the change and generally regarded it as an improvement.

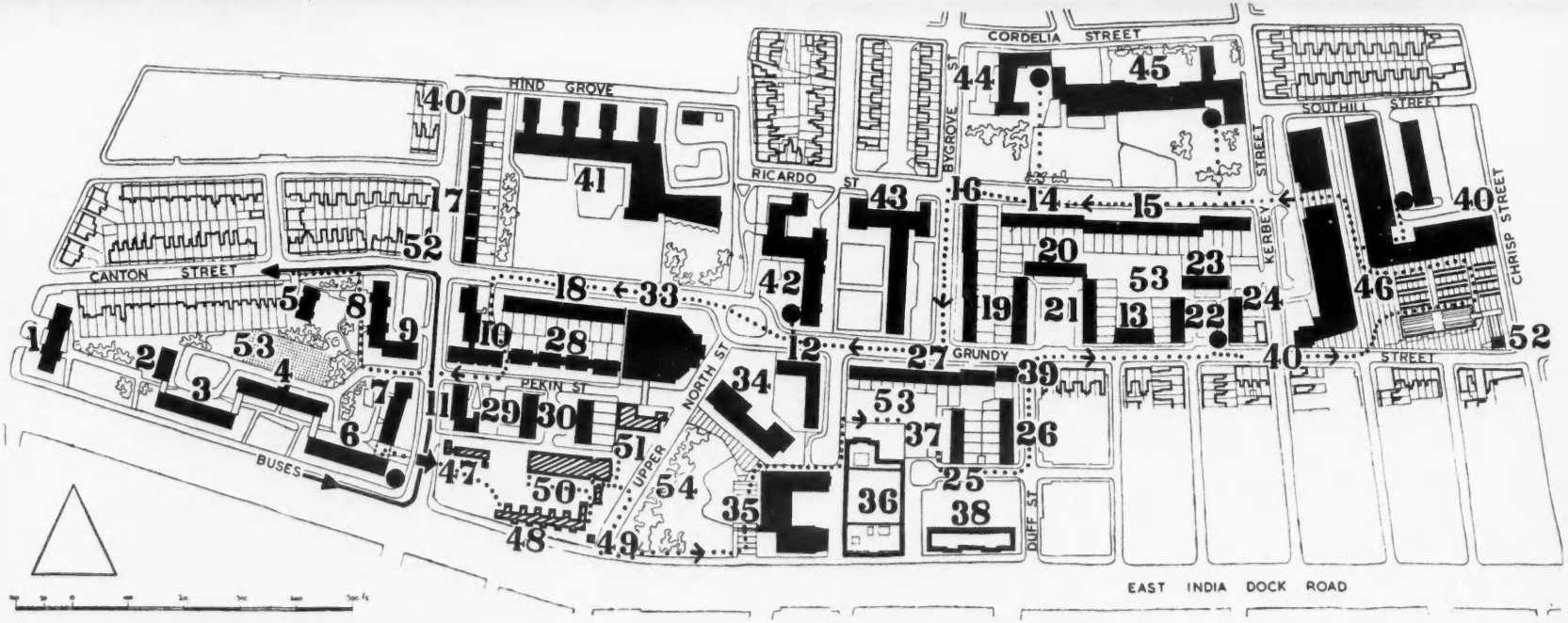
The existing neighbourhood has a rather unsatisfactory road system with little differentiation between major and minor roads and with far too many roads debouching on to East India Dock-road, with its fast-moving industrial and dock traffic.

Three road problems had to be dealt with, but in doing so it was desirable to retain as many as possible of the existing roads because of the high cost of replacing sewers and other services.

The first problem was the diversion of heavy lorry traffic which at present comes from the north through the neighbourhood to East India Dock-road. It



TRINITY CHURCH, POPLAR. CECIL C. HANDISYDE and D. ROGERS STARK, AA.R.I.B.A., ARCHITECTS. Model showing (right) main elevation of large hall. (See page 804.)



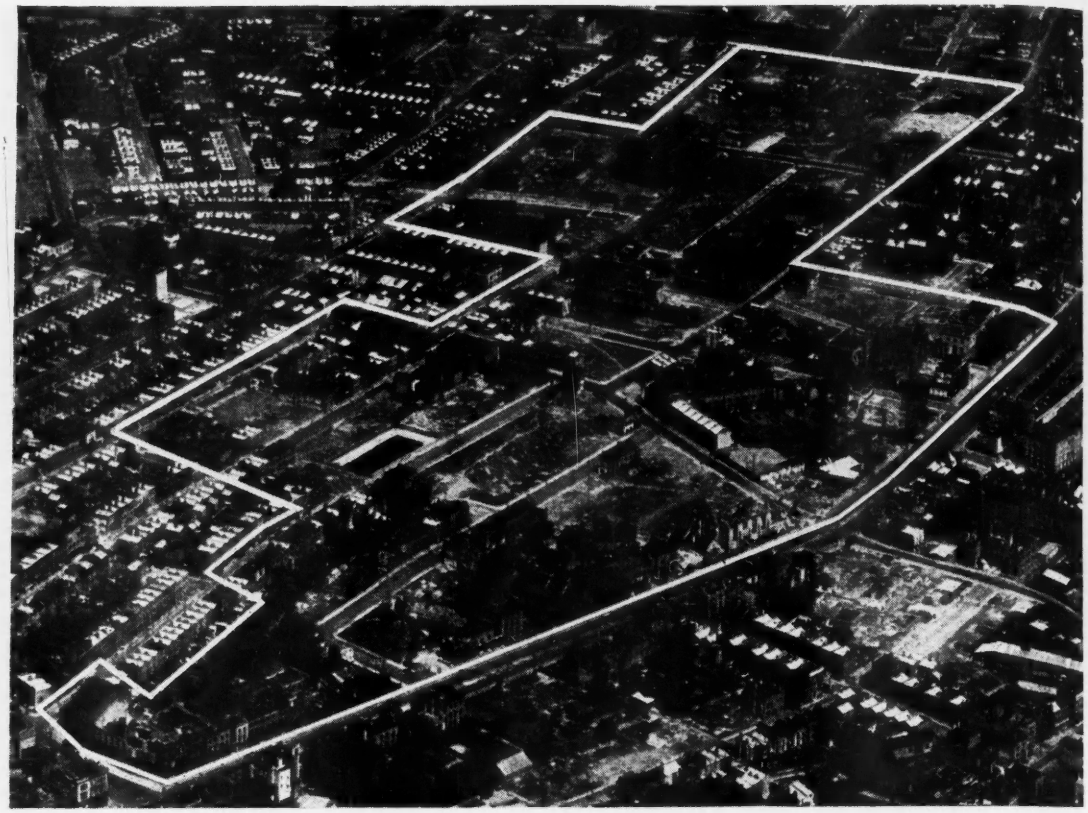
CIRCULATION OF VISITORS .....

KEY

Block No.	Building	Architect
1 and 2	6-storey flats	Director of Housing and Valuer, L.C.C.
3	3-storey flats	
4 and 5	6-storey flats	
6 and 7	3-storey flats	
8	6-storey flats	
9	3-storey flats	
10 and 11	3-storey flats	Bridgwater and Shepheard
12	2-storey flats for old people	G. A. Jellicoe
13	3-storey flats (existing Borough Council flats)	
14 and 15	4-storey maisonettes	G. A. Jellicoe
16	3-storey (2-storey maisonettes with flats over)	G. A. Jellicoe
17	3-storey (2-storey maisonettes with flats over)	Norman and Dawbarn
18	2-storey terraced houses	Bridgwater and Shepheard
19–24	3-storey terraced houses with single-room flats	G. A. Jellicoe
25–27	2-storey terraced houses	G. A. Jellicoe
28	2-storey linked houses	Bridgwater and Shepheard
29 and 30	2-storey terraced houses	Bridgwater and Shepheard
31 (not shown)	Health centre (future) (on site of 47–50)	Architect, L.C.C.
32 (not shown)	R.C. Presbytery (future) (on site of 51)	Adrian Scott
33	R.C. church	Adrian Scott
34	Upper North-street School (existing) Future Community Centre	
35	Trinity church and hall	Handisyde and Stark
36	Seamen's Mission (extensions)	Gunton and Gunton
37	Trinity church manse	Handisyde and Stark
38	Board of Trade (existing)	
39	Public house (existing)	
40	New public house	Stewart and Hendry
41	R.C. secondary school	David Stokes
42	Old people's home	Booth, Ledeboer and Pinckheard
43	Holy Child R.C. primary school (existing)	
44	Ricardo-street nursery school	Yorke, Rosenberg and Mardall
45	Ricardo-street primary school	
46	Shopping centre and market place and public house (latter existing)	Frederick Gibberd

"LIVE" ARCHITECTURE EXHIBITION

Block No.	Building
47	Main entrance and administration block
48	Building research pavilion
49	Vertical feature
50	Town planning pavilion
51	Cafeteria
52	Lavatories
53	Children's playgrounds
54	Amenity park
●	Show flats, show houses, and show classrooms.



LANSBURY NEIGHBOURHOOD UNIT, POPLAR. An aerial photograph showing the area now being developed in the Stepney-Poplar Reconstruction Scheme. Projects now going forward in Lansbury, as the area has been named, will form a "Live Architecture" exhibit for the Festival of Britain, 1951.

was felt that this traffic should be diverted round the eastern edge of the neighbourhood so that the residential centre could become a quiet area.

This diversion via Chrisp-street was obviously impossible while the street market remained and blocked the roadway, and for this reason alone it was necessary to move the market to the west side of Chrisp-street so that the traffic could by-pass it.

The second problem was related to the widening of East India Dock-road, which bounds the neighbourhood on the south. This is a main traffic artery which carries a very heavy and continuous load of fast commercial traffic to the docks. It is proposed to widen it to 100 ft. with a dual carriageway, and to restrict as far as possible the number of side streets debouching on to it.

The third problem is the elimination of the monotonous, wasteful and dangerous "bye-law" road pattern which covers most of the neighbourhood at present.

It was decided to carry out the reconstruction of Lansbury in four stages. In the first stage of reconstruction now being undertaken about a quarter of the neighbourhood will be rebuilt. This includes a complete cross-section of the different kinds of development which will be included in the complete neighbourhood although naturally the proportion of each use is not exactly the same.

After these and other similar problems had been assimilated, a diagram was produced which was little more than a chequer-board of different site uses, but even this stage represented many months of detailed negotiation comprising anxious calculation of site acreages and readjustment of boundaries.

The next stage was the building up of this paper plan into the solid masses of buildings by means of small scale models which could be arranged and rearranged until a satisfactory massing and grouping was achieved. Each grouping had to be tested to see if it would give the required proportions of different housing units, and to be checked for standards of daylighting. Finally, a preliminary solution was worked out which was not intended to be a rigid framework into which detailed plans must fit but rather a broad indication of the lines on which the plan was expected to evolve.

In producing this three-dimensional layout the neighbourhood has been regarded as a series of visual groups. The buildings have been planned round open spaces of varying sizes and shapes, each with its own type of tree planting and its own character, and linked by roads and pedestrian ways. Thus the Upper North-street Park has an ornamental lake and formal terrace as a setting for the public buildings placed around it — two churches, a health centre and a community centre. The market place will be a formal open space of another kind, and to the north of the market place will be a small rectangular place bounded by a school, a few shops and a library, and this in turn will lead to a parkway curving away to the north.

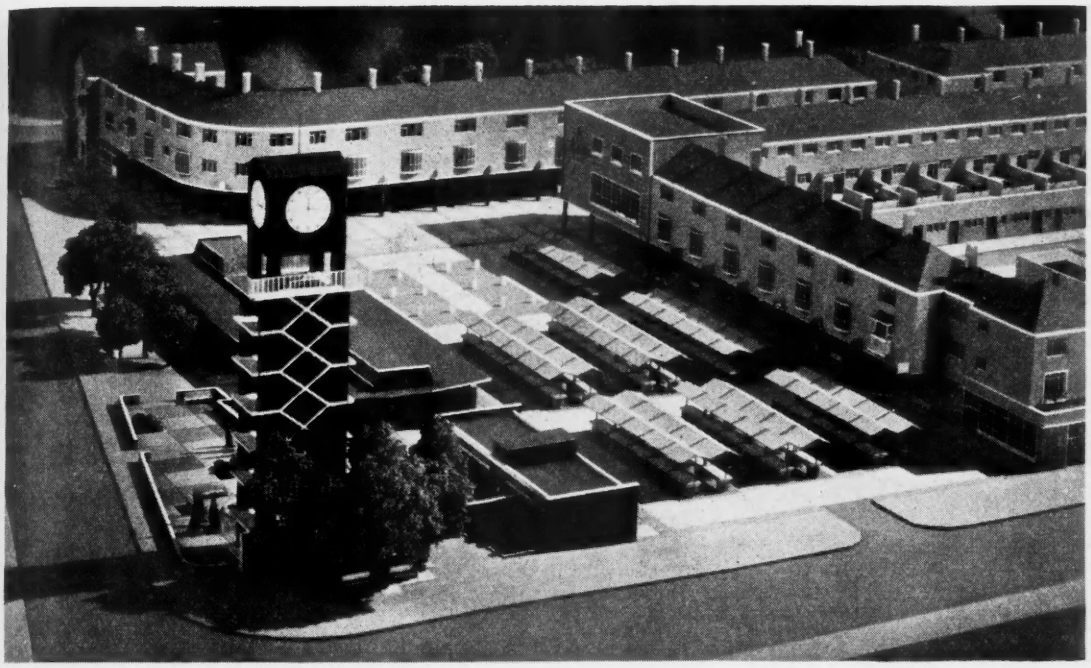
In the same way the housing and flats are grouped into closes and squares of different sizes. The layout can therefore be regarded as a series of groups linked by open spaces.

When it was decided to proceed with the first stage of the scheme the decision had to be made whether the buildings should be designed by one architect or many. The second had obvious advantages in variety of treatment, but it was finally decided that in view of the size of the scheme and the interest which would be obtained by having different architects working closely together, it would be better to adopt the second alternative.

Each architect was asked to conform to the general massing and grouping already agreed on and, in the case of the housing blocks, to a fairly definite allocation of the different types as well. If he felt that the grouping could be improved he was at liberty to say so, and in some cases considerable variations were agreed within the general framework.

Another cause of variation was the massing of the public buildings, which naturally could not be foreseen with any accuracy before they were actually designed. This made it necessary, in some cases, to adjust the buildings adjoining so that the different buildings grouped well together. An attempt has been made to apply the same unifying process to the landscaping treatment and the street furniture.

The L.C.C. staff engaged on this work include: A. G. Ling (Senior Planning Officer), P. Johnson-Marshall, L. W. Lane (Assistant Senior Planning Officers), G. C. Logie, H. S. Howgrave-Graham, F. L. Laing, A. Slingsby, H. N. Allen, E. F. M. Moholi, J. T. Lunn, R. M. Holmes, D. H. Blaxall, and G. A. Moulden. The co-ordinating officer for the progress of building operations is J. H. Whittaker.



SHOPPING CENTRE AND MARKET SQUARE, POPLAR

FREDERICK GIBBERD, F.R.I.B.A., M.T.P.I., ARCHITECT

THE SCHEME is designed to serve as the main shopping centre for the whole Poplar community and is to be extended eventually both northwards and southwards. The shops are planned on two sides of the square, the south side of which will be formed later by the erection of a cinema and further shops, and the east side by a block of small shops and offices.

Within this area an open market square is provided to accommodate temporary stalls. It is hoped that a standard framework and brightly coloured canvas canopy can be provided for each stall. Permanent stalls for the sale of meat and fish are also to be provided in a covered market building.

At one corner of the square it is proposed to erect a clock tower, and this will provide contrast to the comparatively low shop buildings. The tower has a double staircase of scissor-shape, leading up to a viewing platform.

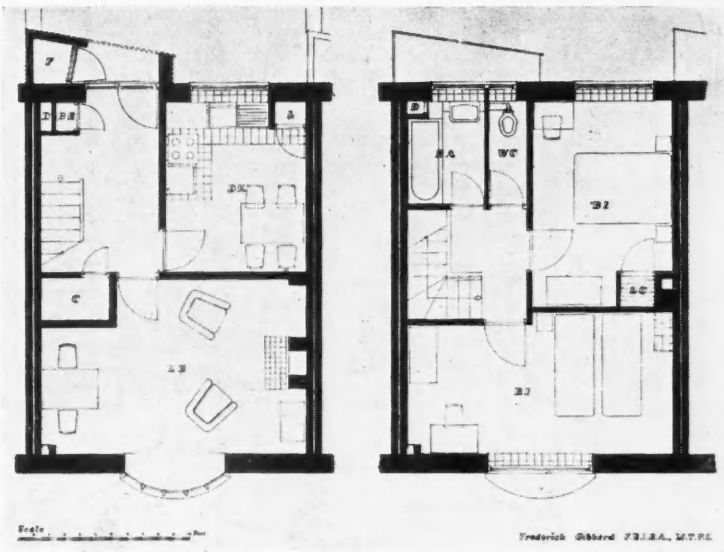
The shop fronts around the market square are recessed to provide a covered arcade, and the whole scheme has been set out on an 18 ft. grid, produced by the party walls of the shops and of the maisonettes above them. The grid lines are extended over the whole of the market square and pedestrian way by the pattern of the pavings. A small formal garden is laid out next to the clock tower.

In most cases the shops are single-storey with maisonettes on two floors above. The maisonettes have bow windows looking over the market square in front.

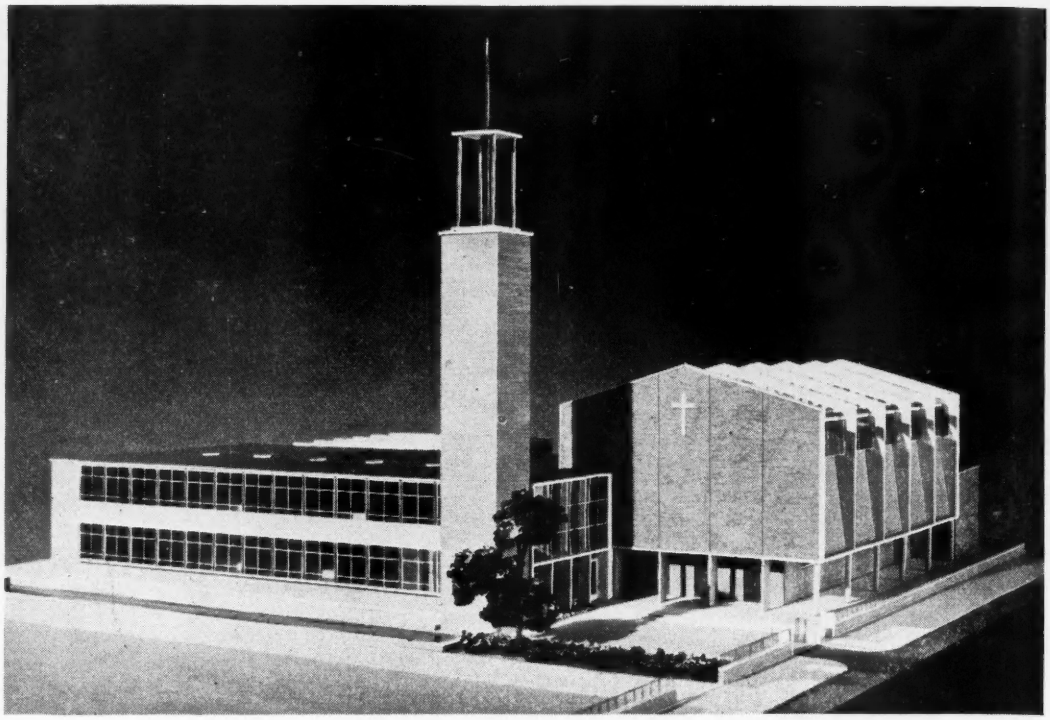
The majority of the shops are at 18 ft. centres with depths of about 60 ft., although this dimension is varied in places. The maisonettes above have generally a living-room and a dining-kitchen on the ground floor, and two bedrooms, bathroom, and w.c. on the first floor. Variations to this standard type have been provided.

The external walls of the maisonettes are of London stocks, but dark plum reds are used for the smaller buildings to give colour contrast. The copings and gutter units, etc., are of artificial stone and the roofs are of grey-green slates.

All columns and piers at ground level are faced with blue faience tiles, and the elevation of the three-storey shop to the market square is on light grey faience. Steel windows in wood frames are used. Construction generally is of load-bearing brick walls, hollow tile first floor between shop and maisonette, and timber second floor and roof. R.C. arcade columns carry r.c. beams at first-floor level which again carry the 13½-in. external walls of the maisonettes. The hollow tile floor slab spans between the party walls at first floor. Roof construction is of timber to a 35 deg. pitch, with grey-green slates in diminishing courses. [Key reference, 46.]



Plans of maisonettes.



TRINITY CHURCH AND HALL, POPLAR

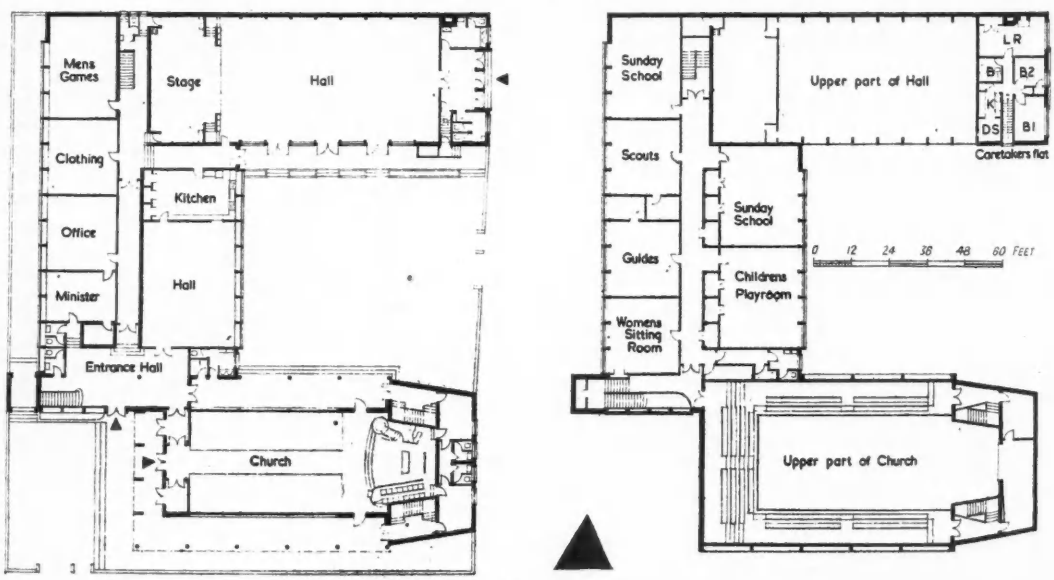
CECIL C. HANDISYDE AND D. ROGERS STARK, AA.R.I.B.A., ARCHITECTS

THE REQUIREMENTS were to provide a very light and airy church to seat 400 people, but to be arranged to provide comfortable conditions for a smaller congregation for normal services. The design shows a plan for a church with a gallery round three sides. The gallery is projected outwards over "cloisters" in order to give a compact ground floor church for small congregations. Day lighting is mainly from a number of small dome lights in a flat roof. There are also high level side windows which are uninterrupted by any structural members and which run up to the ceiling level. The frame is reinforced concrete.

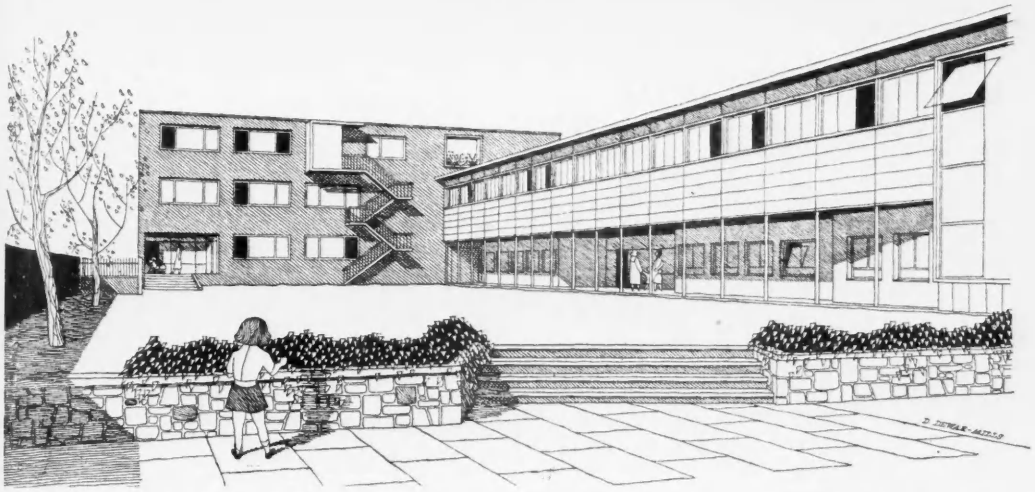
The other buildings consist of a main hall, with full stage and separate entrance, and a small hall and kitchen placed between the halls. Clubrooms are on two floors in the building between the church and main halls.

The tower and various other parts of the exterior will be in London stock brick. The end walls of the church will be in textured concrete panels using a brick aggregate. The main trusses of the church have a bush-hammered concrete finish and the arcade columns will be in a light-grey terrazzo. The sloping side walls of the church are to be covered in copper sheet.

The clubroom block has a brick base. The horizontal panels between ground- and first-floor windows are to be in light grey terrazzo precast slabs and window mullions in glossy blue finished pressed metal. [Key reference, 35.]

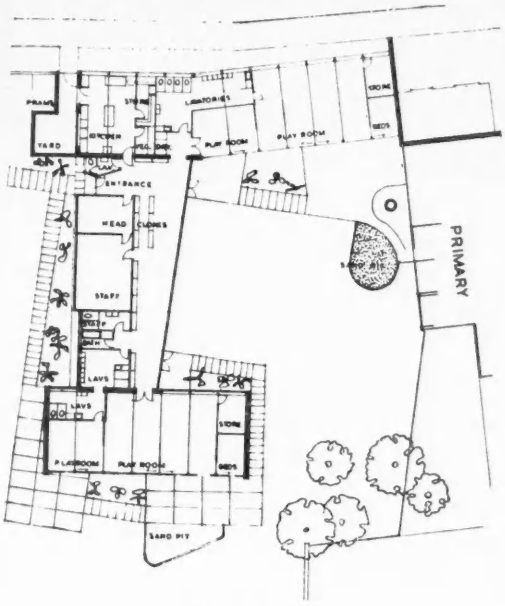


Ground- and first-floor plans.



RICARDO STREET PRIMARY AND NURSERY SCHOOLS, POPLAR

F. R. S. YORKE, E. ROSENBERG AND C. S. MARDALL, F., L. AND A.R.I.B.A., ARCHITECTS



Plan of nursery school.

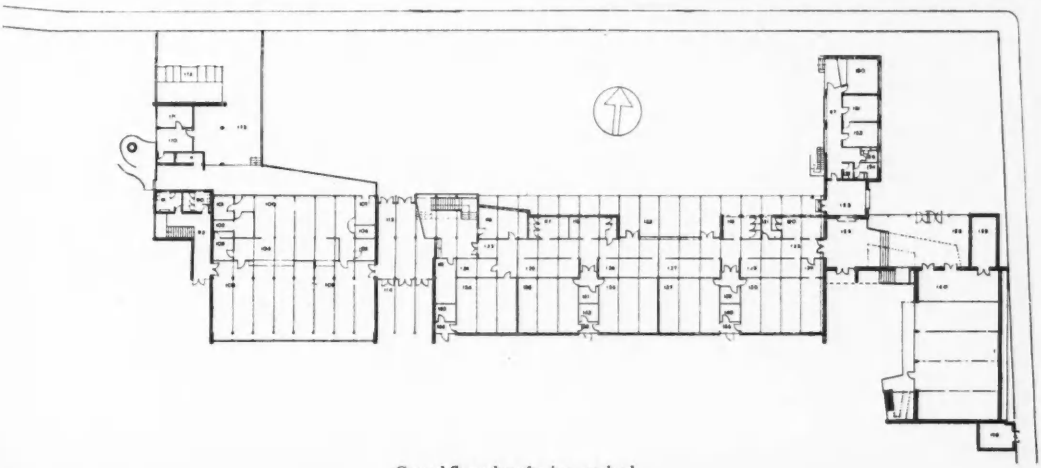
THE NEW Ricardo-street Primary and Nursery Schools will occupy an island site of three acres. The Primary School is designed to accommodate 320 juniors and 200 infants. The main building is planned on two floors, the juniors occupying the first floor in eight classrooms and the infants the ground floor in five classrooms. The classroom block is so designed that both ground- and first-floor classrooms and lavatories get cross lighting and ventilation, the first-floor classrooms being approached by bridges across a light well.

The paved playing areas for juniors and infants are separated.

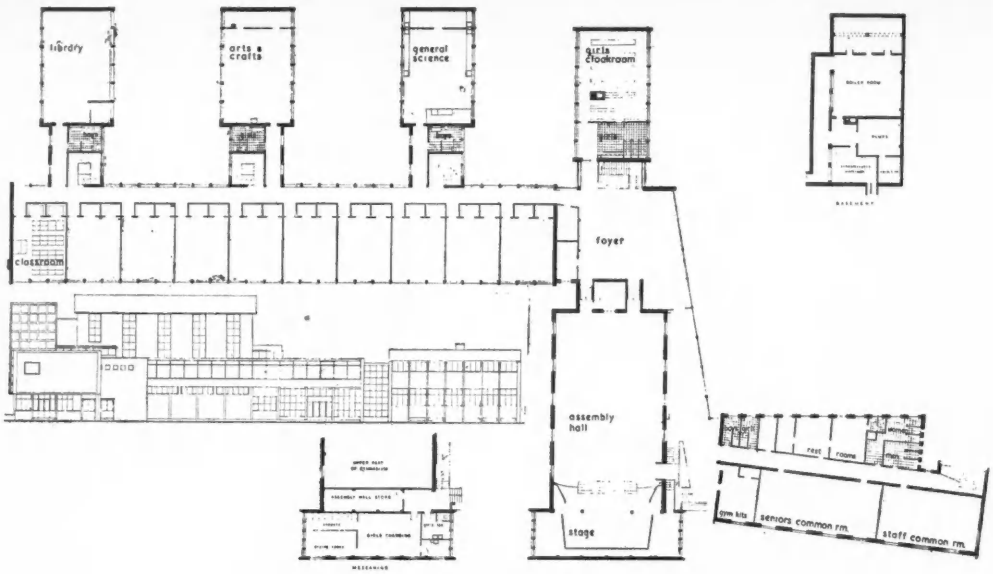
The nursery school will accommodate 80 children and is a separate single-storey building, self-contained except for sharing the mechanical services with the main school.

CONSTRUCTION: The classroom block is planned on an 8 ft. 3 in. grid and constructed with a light welded steel framework, faced externally with 8 ft. 3 in. by 1 ft. 4 in. by $2\frac{1}{2}$ in. spar-faced concrete slabs. Floors and roofs are of precast concrete units. All ceilings are of wood wool. The ends of this block are stopped by yellow stock brick walls. Similar bricks are used for the remainder of the building except the assembly hall group which is of reinforced concrete and steel with stock brick and Hornton stone facing and roofed with copper. The administration block is of load-bearing stock brick walls and hollow pot floors and roof. Except for the assembly hall the main building is covered with built-up bituminous felt roofing with spar finish on $\frac{1}{2}$-in. insulation board.

The nursery school is built of load-bearing stock brick walls and light steel frame combined and is covered by a one-way pitched roof of copper. [Key reference, 44 and 45.]



Ground-floor plan of primary school.



First-floor plan and gymnasium and entrance hall elevation.

ROMAN CATHOLIC SECONDARY SCHOOL, POPLAR

DAVID STOKES, F.R.I.B.A., ARCHITECT

THE SCHOOL is a three-form entry senior modern Roman Catholic school for boys and girls—about 450 children of 11 to 15 years of age.

The layout is designed to provide a pleasant setting to the entrance with trees and lawns. The classrooms are protected by shrubs and trees from the playground which is to be light red in colour. The dining hall looks out over a pool on to a small garden adjoining the proposed pedestrian way, which is to take the place of the existing street on the east boundary.

In principle, the classrooms and special rooms are arranged in three two-storey pavilions of a "T" shape on plan, with staircases at the junctions. These pavilions are joined together and connected by a corridor on the first floor. Indoor circulation is provided only on the first floor, so as to allow cross lighting and ventilation for the ground-floor teaching rooms.

The entrance hall forms a link between the cloaks pavilion and the gymnasium and assembly hall unit.

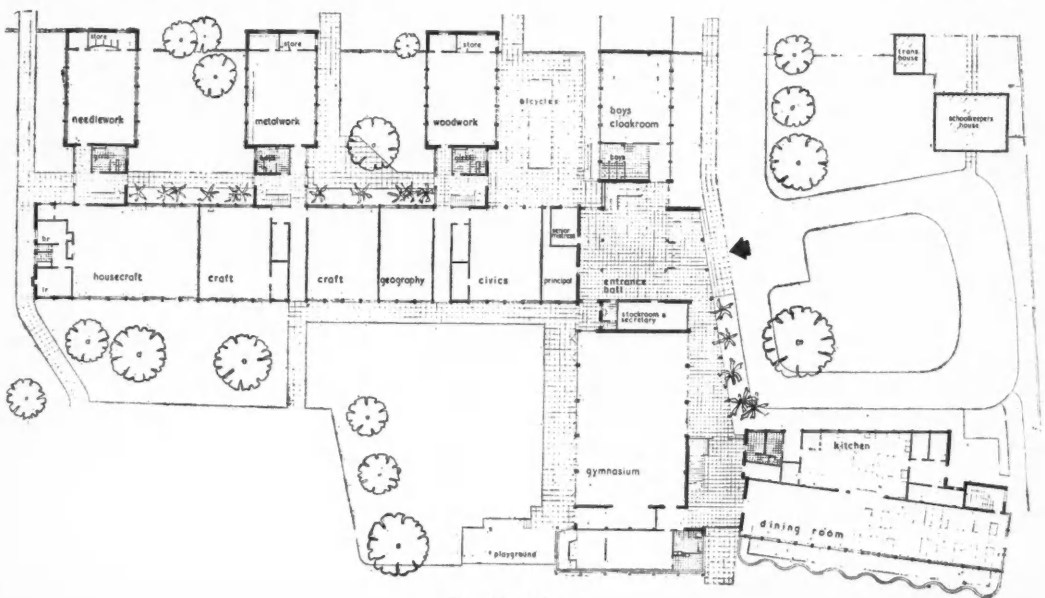
The stage is provided with daylight from the sides for drama classes and has a low ceiling to assist the acoustics. The stage apron can be altered either to form steps running the full width of the hall or to provide stepped platforms for an orchestra.

The medical rooms and common rooms are planned over the dining and kitchen accommodation to form a separate unit linked to the entrance hall by a covered way and connected by a first-floor corridor to the rest of the school.

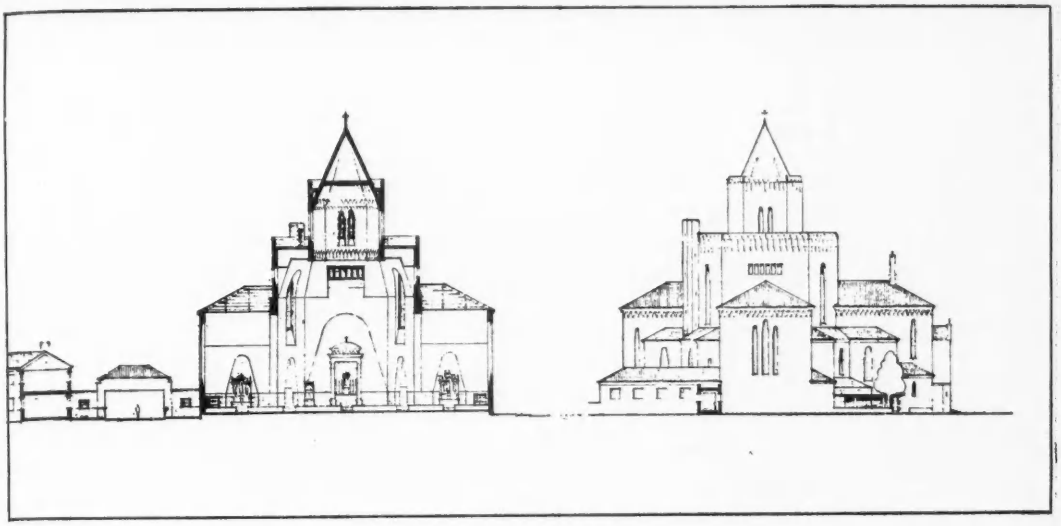
Washing and sanitary accommodation is distributed throughout the school. Cross lighting is provided in the special rooms, while the classrooms have a top light and a low window on one side protected by overhanging eaves designed to keep the sun off the desks during the summer term.

The school is to be constructed with an exposed reinforced concrete frame and load-bearing brick walls.

[Key reference, 41.]



Ground-floor plan.



Section and elevation.

ROMAN CATHOLIC CHURCH AND PRESBYTERY, POPLAR

ADRIAN GILBERT SCOTT, M.C., F.R.I.B.A., ARCHITECT

THE DESIGN PROBLEM here was complicated by the sites allocated not being large enough to accommodate the church, presbytery and assembly hall required by the church authorities, so that the assembly hall has had to be omitted from this particular scheme, and a site for this will have to be found at a later stage.

Although the old church, seating about 700, had proved too small for the requirements of the old parish, it was decided to build the new church to the same seating accommodation as the old one owing to the fact that, as now planned, the district is to accommodate about half the former population.

The square-shaped site and the modern church requirement of unobstructed views of the altar naturally led to the Greek Cross type of plan and this, with the modern-sized sacristies filling up the "eastern" corners, completely occupied the larger of the two sites, while the smaller plot provides a good presbytery site, which, though without the direct access to the church as desired by the church authorities, has been provided with a covered access way, at the suggestion of the L.C.C., across the footpath end of Pekin-street, which should form a rather attractive feature.

The fact that all the adjoining buildings were to be built in brick naturally suggested a brick design for the church, and the Greek Cross plan and the idea of a central lantern, which was a feature of the old church, led to the design as shown, with the central octagon forming a conspicuous feature from all points of view, especially from East India Dock-road across the newly planned public gardens, and from the shopping centre at the other end of Grundy-street.

Although it was desired to follow the Catholic tradition of ecclesiastical architecture, some modern flavour has been introduced into the design to be in keeping with modern times. The interior will be finished in simple plastered surfaces with a coloured stone dado and decorative floor through which the church will be heated. A marble baldachino over the high altar is intended to form the focal point of the interior, and thus produce the desired devotional effect. The presbytery building will be designed as simple and small in scale as possible as a foil to its larger neighbour, the church. [Key reference, 32 and 33.]

The plans.

Ground-floor plan.

HOME FOR OLD PEOPLE, POPLAR

BOOTH, LEDEBOER AND PINCKHEARD, F. AND AA.R.I.B.A., ARCHITECTS

THE ERECTION of an old persons' home in the new neighbourhood relates to the policy of providing locally for those inhabitants who find it difficult, through age and debility, to live on their own or to look after themselves, but who are not hospital cases. This home for the L.C.C. Welfare Department provides for 49 persons of both sexes and five resident staff. The accommodation is on two floors only, and consists of 33 single and six double bedrooms, each with wash-basin and hanging cupboard. There are five sitting rooms of various sizes, one of which is to be equipped with bookshelves. The dining room is to contain a small movable altar for religious services and is to be wired for cinematograph shows. All sitting rooms are to have wireless, and one of the large sitting rooms is to be wired for television.

Special features of the home are non-slip floors, handrails to corridors, an easy going staircase, and a small shop where residents can buy cups of tea, cigarettes, etc.

The building is of brick, with reinforced concrete floors and low-pitched, slated roof. External walls are of cavity construction with an outer structural skin of 9-in. brickwork and an inner non-structural skin of 3-in. hollow clay blocks.

The building is centrally heated and particular attention has been paid to thermal insulation. The wall construction described gives a "U" value of 0.20. Heat loss from the roof is reduced by an insulating quilt laid above the first-floor ceiling. All plumbing is installed internally in ducts. [Key reference, 42.1]

FLATS AND MAISONETTES, POPLAR

NORMAN AND DAWBARN, F.R.I.B.A., ARCHITECTS

THESE DWELLINGS, grouped in a continuous terrace, comprise 12 two-storey houses on ground and first floors with nine flats over and will be as follows : four-room maisonettes, 9 ; five-roomed maisonettes, 3 ; three-room flats, 6 ; two-room flats, 3. Total, 21 dwellings.

In the maisonettes, ground floors are planned with "through" living and dining areas partially separated by the projecting chimney breast, giving west and east aspect, respectively. Kitchens also have east aspect on to the back gardens, and it will be noted no "back doors" are provided. Access to the garden, dustbin, fuel stores, etc., is via the dining space which is so closely related to the working kitchen as to virtually form a "dining kitchen."

All bedrooms have built-in cupboards, and there is a heated linen cupboard off the landing. Bathroom and w.c. are separate, but there is no ground-floor w.c. for reasons of economy.

In the flats the ends of the access balconies serving the three-room flats are increased in depth and articulated to form private balconies facing west. The two-room flats have semi-recessed balconies facing east, which appropriately punctuate the otherwise uniform windows pattern on the street front.

Three-room flats have separate bathroom and w.c. but these are combined in the two-room type. All flats have built-in cupboards and similarly equipped kitchens to those in the houses.

Hot water supply in all dwellings will be by back-boiler in the living-room stove, feeding an insulated h.w. cylinder, with immersion heater for summer use.

The living-room stove will provide background heat to the dining space and one or two bedrooms by gravity warm air ducts. Bedroom No. 1 will have a built-in gas panel fire and all dwellings are fully carcassed for electricity and gas.

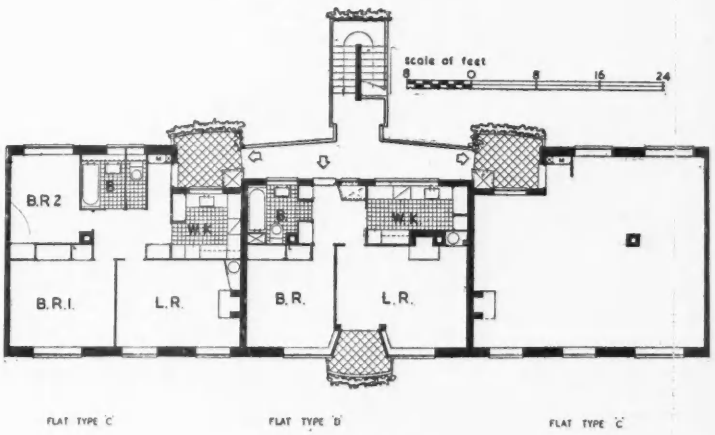
External walls are 13½-in. solid through three storeys with *in situ* r.c. hollow tile floors. The provision of 9-in. spur walls between kitchen and dining space on the types "A" and "B" houses, in conjunction with the normal party walls, facilitates the use of deep r.c. upstand beams above second-floor level to carry the party structures between the flats. These will be of cavity construction to reduce dead load and improve insulation.

Roofs are of 25 deg. pitch, framed up with light timber trusses at approximately 7 ft. centres with normal purlins and rafters, and covered with sarking, battens, and random Welsh slates. The ground storey to window head level is faced with dark plum-coloured facings with upper storeys in mild stocks. Windows and casement doors generally are standard E.J.M.A. wood units ; living-room windows have large centre fixed lights and all rooms have fanlight vents. Approved composition tile floors will be laid throughout.

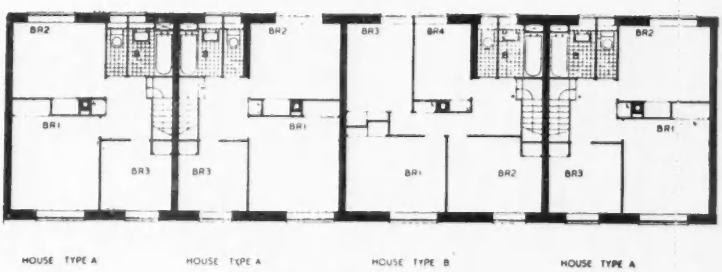
Walls generally are cement gauged lime plaster finished with washable distemper. Tiled splashbacks are provided to baths, basins and sinks.

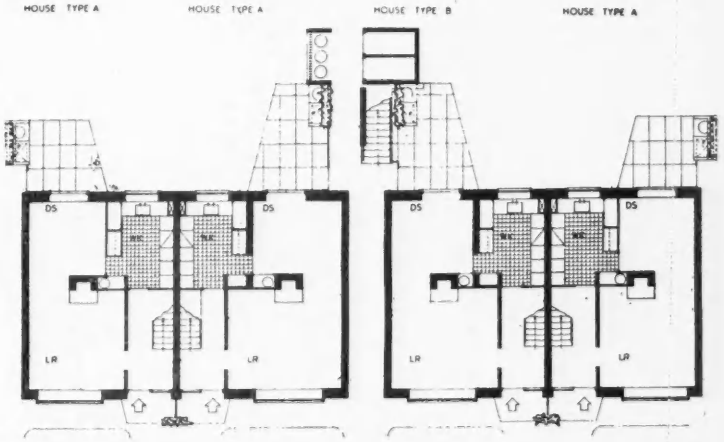
Back gardens will be separated by fencing. Brick screen walls projecting 10 ft. from houses give a measure of privacy to the small paved terraces. The remaining area will be prepared for tenants' planting. [Key reference, 17.]

Perspective view of flats and maisonettes.

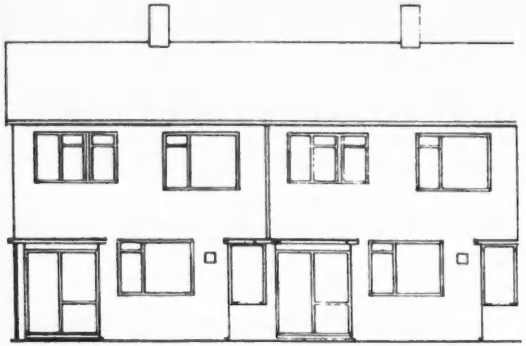


Plans of flats.

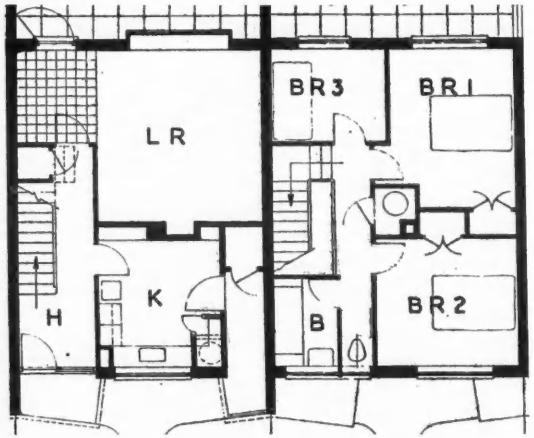


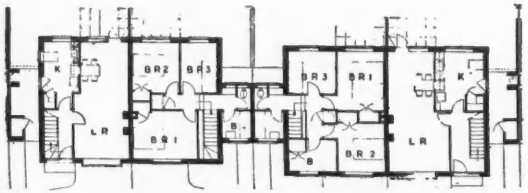


Ground- and first-floor plans of maisonettes.

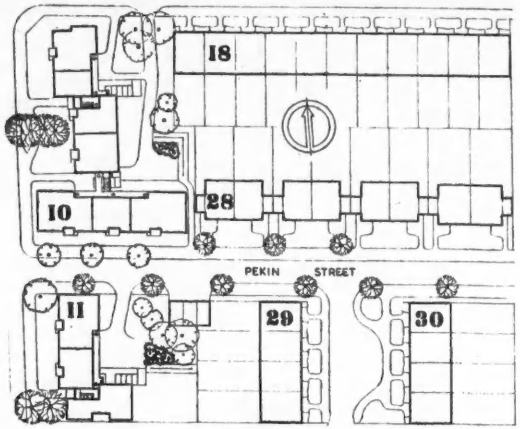


Elevations and (below) plans of two-storey terrace houses, blocks 29 and 30.





Plans of linked houses, block 28.



The layout.

FLATS AND TERRACE AND LINKED HOUSES, POPLAR

BRIDGWATER AND SHEPHEARD, ARCHITECTS

THE DWELLINGS on this site consist of 30 flats in two three-storey blocks and 27 houses of which 19 are of the terrace type and eight are linked. The accommodation provided is as follows: four-room terrace houses, 19; four-room linked houses, 6; five-room linked houses, 2; one-room flats, 3; two-room flats, 9; three-room flats, 9; and four-room flats, 9. Total, 57.

The 30 flats are contained in two three-storey blocks, three or four flats per staircase with short access balconies which pass kitchen and bathroom windows only.

The 27 houses are in four terraces. Each house is provided with a back garden, access being via the links (in the case of the eight linked houses) and by means of common paths to the ends of the gardens of the normal type terrace houses.

In the flats private sun balconies with flower boxes face west or south. Refuse disposal is by means of chutes and refuse chambers, and perambulator stores are at the foot of each staircase with covered access way. A drying room with gas-heated drying cabinets is provided in a central position in each block.

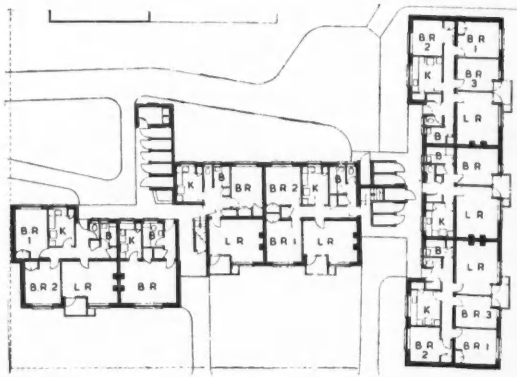
The normal-type terrace houses which have three bedrooms, kitchen and living-room have 20 ft. frontages. The kitchens are situated on the street side.

The linked houses have frontages of 25 ft. (three-bedroom type) and 27 ft. 6 in. (four-bedroom type). In each case the through living-room, kitchen and bedrooms form the main part of the house, the links containing a way through to the garden, kitchen and dustbin, with cycle and fuel stores on the ground floor, and bathroom and w.c. on the first floor. First-floor ceiling height to the links is 7 ft. 6 in.

External walls of flats are 14-in. solid with 9-in. spine and cross walls carrying 5 in. reinforced concrete floors. Roofs are of timber covered with slates at 25 deg. pitch. External walls of houses are 11-in. cavity. Floors are solid on ground floor, and of timber on first floor. The roofs of the main parts of the houses are of timber with slates at 25 deg. pitch, the links having concrete flat roofs. Facings are to be London stock bricks throughout, and windows generally are to be standard E.J.M.A. wood units of the thicker section.

[Key references 10, 11, 18, 28, 29 and 30.]

Elevations and (below) ground-floor plans of block 10.

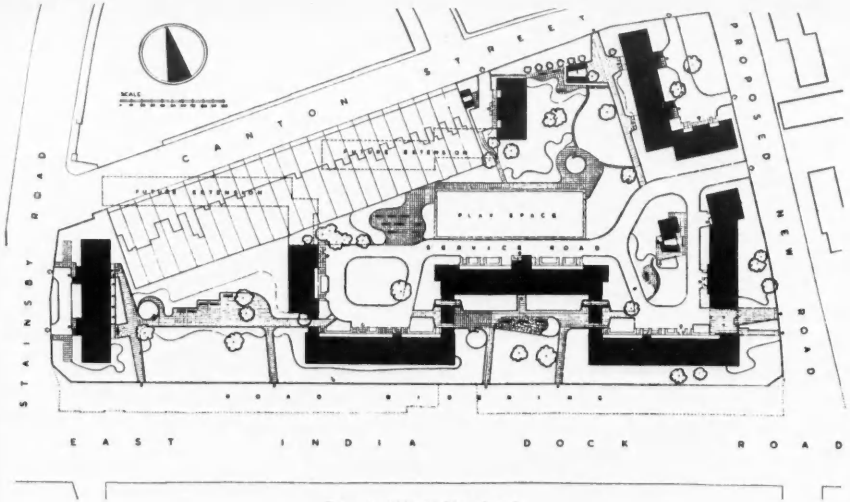


Plans of linked houses, block 28.

type) and 27 ft. 6 in. (four-bedroom type). In each case the through living-room, kitchen and bedrooms form the

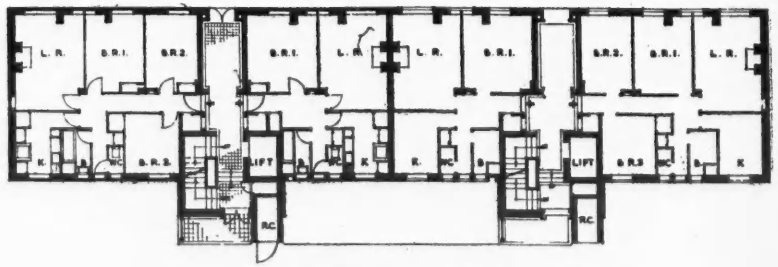
are to be standard E.J.M.A. wood units of the thicker section.

[Key references 10, 11, 18, 28, 29 and 30.]



Layout of blocks Nos. 1 to 9.

Typical elevations, blocks 1 to 9.



Ground-floor plan of six-storey blocks.

SIX- AND THREE-STOREY FLATS, POPLAR

CYRIL H. WALKER, O.B.E., M.C., F.R.I.B.A., L.C.C. DIRECTOR OF HOUSING AND VALUER, S. HOWARD, L.R.I.B.A., HOUSING ARCHITECT

ON THIS SITE accommodation will be provided for 158 dwellings (approximately 500 rooms) in nine blocks of flats, five of six storeys and four of three storeys. Blocks 2 and 5 are not part of the immediate building programme, but form part of future extensions. The blocks on the East India Dock-road frontage are sited to permit of a future possible widening of this road to 100 feet.

The internal planning of the flats conforms with the approved standards adopted by the Council.

The blocks will be of traditional brick construction with load-bearing walls faced externally with "London" stocks. The six-storey blocks will have brick parapets and a low-pitch roof. The three-storey blocks will have silver-grey slate roofs, with eaves and gabled ends. Most flats on upper floors will have sun balconies, accessible from the living-room. Glass brick panels are introduced into the common access balconies and balcony fronts. British Standard metal casements in wood surrounds will be used. Six-storey blocks will have perambulator lifts (eight persons).

Floors will be of normal filler joist and concrete construction and also special proprietary types. Floor finishings will be in various types of plastic composition surfacing. Space heating for the living-rooms and bed-sitting-rooms is by a solid smokeless fuel fire with a back boiler. Larger flats will also have radiators.

Block 1 is on the site of the Poplar Hippodrome, which contained basement accommodation, and it is therefore proposed to utilise the excavated portion for the provision of a communal laundry, estate store, tenants' workshop, perambulator and tenants' trunk stores. The remaining blocks will have small self-contained communal laundries. The chute and container system of refuse disposal is provided in all blocks. All plumbing work will be internal contained within ducts in the blocks.

[Key reference, 1 to 9.]

Ground-floor plan of three-storey blocks.

MAISONETTES, HOUSES AND FLATS, POPLAR

G. A. JELLICOE, F.R.I.B.A., ARCHITECT

THESE DWELLINGS are in one two-storey, eight three-storey (including 20 terrace houses) and two four-storey blocks comprising in all 53 flats, 72 maisonettes and 20 three-storey houses, together with 21 houses in three two-storey blocks, giving a total of 166 dwellings.

These buildings will be constructed of traditional and standard materials. In 166 dwellings there are sixteen distinctive type plans, and within each type there is considerable variation. The maximum exact repetition of any one type is 17.

Architecturally the complex interiors are resolved into unified façades.

The road façades are intended to be urban and classical in character, although there is no specific classical detail. The scale is governed by the family unit as expressed by the front doors, and access stairs to flats, for example, are suppressed as a feature.

Foundations to be of mass concrete and external walls of load-bearing brickwork.

Suspended floors to two-storey houses will be of wood joists boarded and to multi-storey blocks floors of fire-resisting construction between dwellings specially insulated against sound.

Pitched roofs to be covered with Welsh slates.

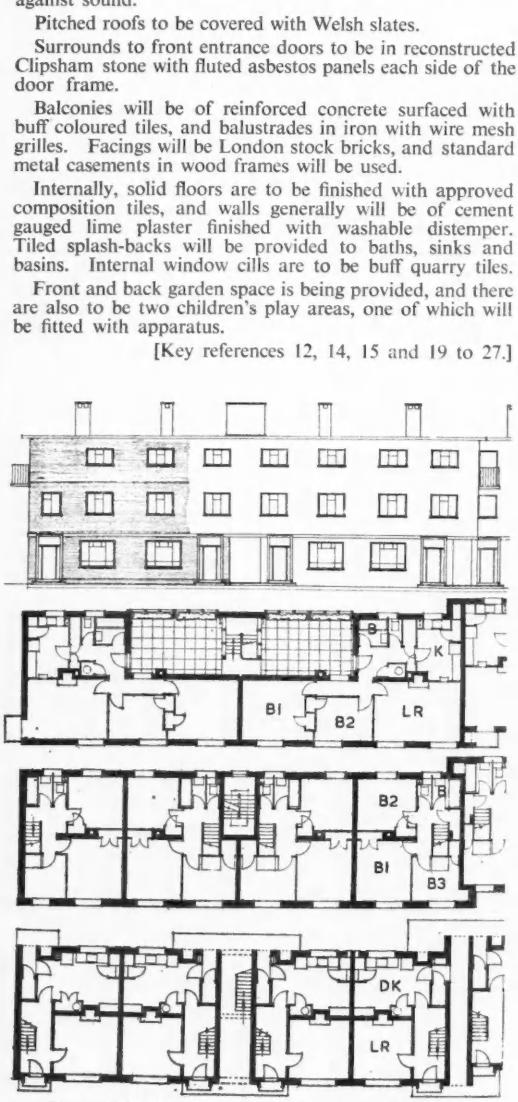
Surrounds to front entrance doors to be in reconstructed Clipsham stone with fluted asbestos panels each side of the door frame.

Balconies will be of reinforced concrete surfaced with buff coloured tiles, and balustrades in iron with wire mesh grilles. Facings will be London stock bricks, and standard metal casements in wood frames will be used.

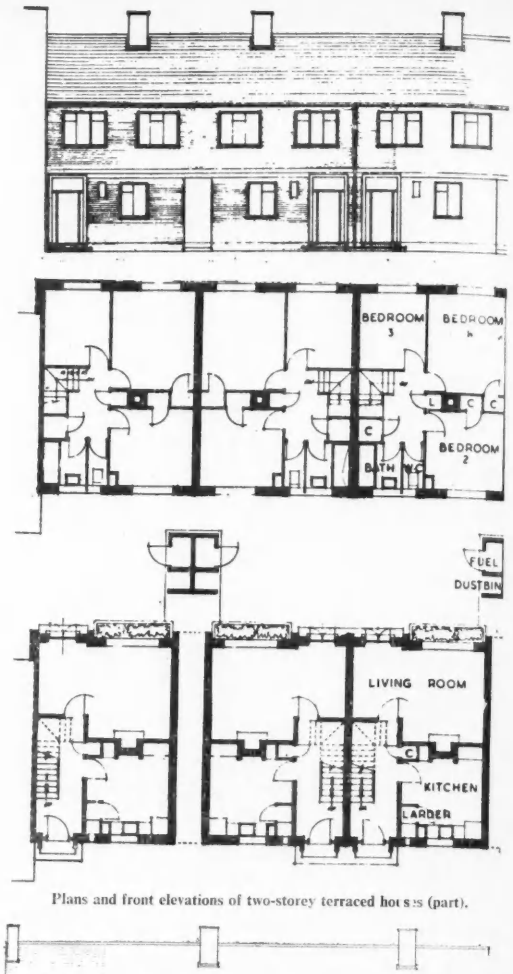
Internally, solid floors are to be finished with approved composition tiles, and walls generally will be of cement gauged lime plaster finished with washable distemper. Tiled splash-backs will be provided to baths, sinks and basins. Internal window cills are to be buff quarry tiles.

Front and back garden space is being provided, and there are also to be two children's play areas, one of which will be fitted with apparatus.

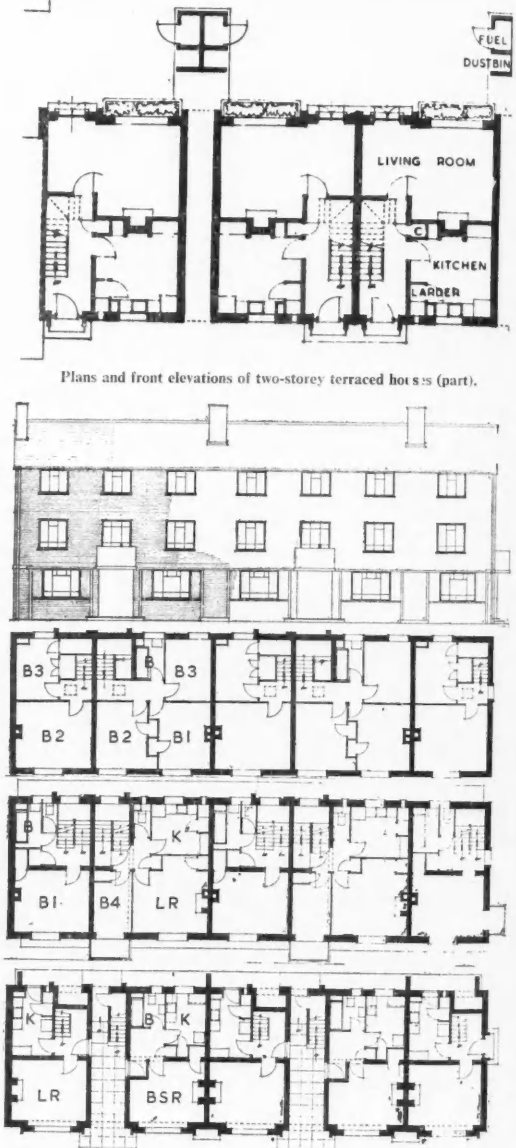
[Key references 12, 14, 15 and 19 to 27.]



Plans and elevations of two-storey maisonettes with flats over.



Plans and front elevations of two-storey terraced houses (part).



Plans and elevations of three-storey terraced houses with single room flats.

NOTES AND NEWS

British Architects' Conference

THE British Architects' Conference held at Bristol and Bath towards the end of last week could not have been a greater success. Perfect weather, the ready friendliness of the people of Bristol and Bath and the splendid organisation of each and every event in the Conference programme, all combined to make the three days spent in the West Country most memorable. All thanks are due to the President and members of the Bristol Society of Architects and to the members of the Conference Executive Committee for their hard work in arranging the various functions and entertainments.

The two papers read at the Conference admirably fulfilled expectations. Lord Rosse, who outlined some of the practical difficulties involved in the preservation and protection of historic buildings, had no cause to apologise for speaking on the subject as an amateur. Indeed, he summarised the difficulties of this complex problem so ably and with such well informed assurance that those who contributed to the subsequent discussion could do little more than pronounce their agreement with everything that he had said. It is to be hoped that notice will be taken in official quarters of Lord Rosse's suggestion that the State should contribute to the cost of works of this nature.

The Hon. Lionel Brett's paper on the new city centres of Europe was perhaps a masterpiece of its kind, and here again there seemed to be little scope left for amplifying discussion. However, Conference members were interested to hear from Mr. Anthony Mealand, who seconded the vote of thanks to the speaker, of the determination of the Corporation of London to see that its plan for future development was fully implemented and not tucked unobtrusively away in a pigeon-hole.

The high standard set by these two papers was maintained by other events in the Conference programme, notably at the Conference dinner in Bristol on the Friday night when the speeches, without exception, combined well-chosen humour with sound common sense.

It was not without regret that members dispersed on Saturday, but even as they did so, workmen were busy in the City centre of Bristol building dwarf walls and laying out gardens on former bombed sites, an operation which seemed to symbolise all that Conference members had seen and learned of the spirit of the West Country folk.

Centenary Commemoration.

THE SAME unostentatious style of presentation which characterises the ordinary editions of their journal has appropriately been used by the Bristol Society of Architects in the special Centenary Number just issued.

The chief feature to which prominence is given is a detailed, informative account of the highlights in the activities of the society between 1850 and the present, by Mr. Lance Wright, A.R.I.B.A. Among other items are some extracts from an interesting address given at Bristol in February this year by Professor A. E. Richardson, R.A.

Illustrations have been well chosen, and a series of photographs of "commonplace objects met practically every day by the man-in-the-street" in Bristol, provides a pleasing display. There is also a reproduction of a seal similar to the one affixed inside the cover of the first minute book of the society. A foreword is contributed by Mr. R. S. Redwood, A.R.I.B.A., president of the society.

F. Ll. W. at the A.A.

MR. FRANK LLOYD WRIGHT, the American architect, is expected to be present and distribute the prizes and studentships at the Architectural Association School of Architecture on July 14. Mr. Wright will arrive in this country early next month.

R.A. School of Architecture.

THE ROYAL ACADEMY SCHOOL OF ARCHITECTURE is a day school for not more than ten students who have taken a British university degree in architecture or have passed the final examination of the Royal Institute of British Architects.

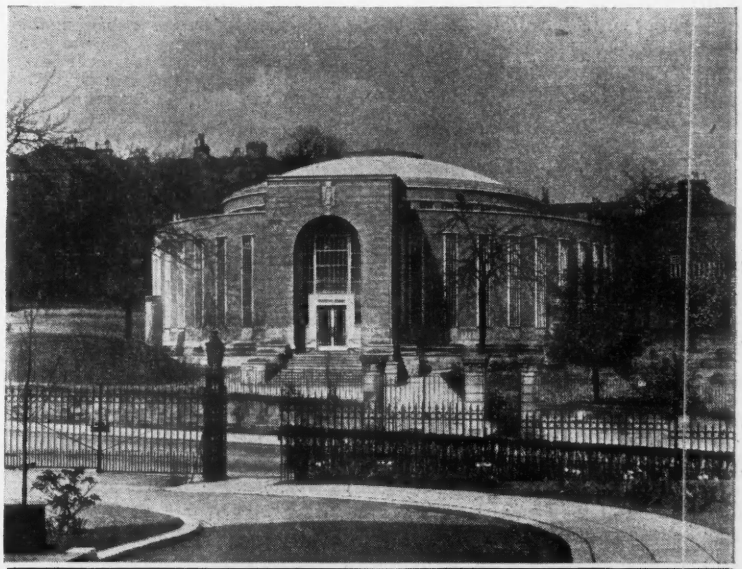
Qualified students may be accepted for an advanced course of training comprising an intensive study of civic architecture and the preparation of designs for buildings of national importance. The course is for one year and is gratuitous. The students will compete each year for a Royal Academy Grand Prize of £300, and a second prize of £150 presented by the Lord Fairhaven.

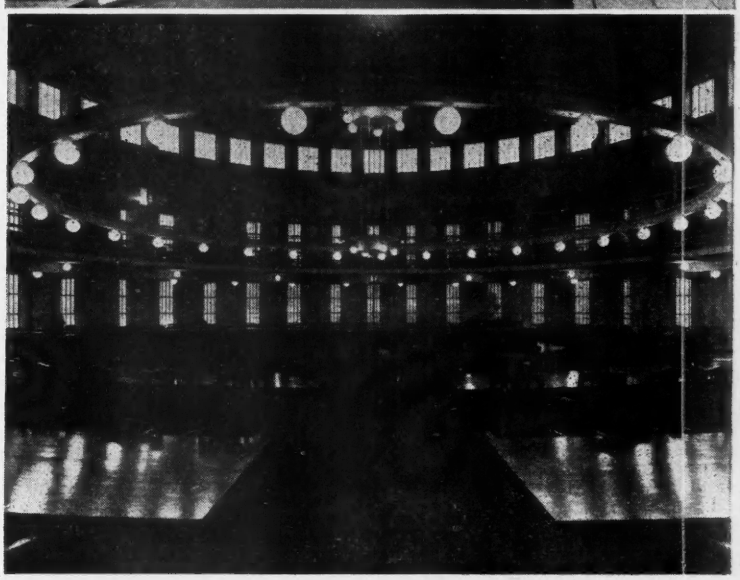
Students who wish to take this course for the year 1950-51 should apply to the secretary, Royal Academy of Arts, Piccadilly, W.1, stating their age and qualifications, and should send with their application a portfolio of studies and designs on July 24 next. Selected candidates will be invited to an interview with the director of the school, Professor A. E. Richardson, R.A.

Summer Schools, York.

A SUMMER SCHOOL of architectural history and measured drawing, arranged by the York Civic Trust in association with the York and East Yorkshire Architectural Society and the West Yorkshire Society of Architects, is to be held at St. John's College, York, from August 12-26.

The particular objects of the summer school are—(a) to enable students of architecture to make measured drawings of buildings in York under the guidance





THE READING ROOM, GLASGOW UNIVERSITY. T. HAROLD HUGHES and D. S. R. WAUGH, ARCHITECTS. As reported in our issue of June 9, the architects for this building have been awarded the R.I.B.A. Bronze Medal for the best building erected in Scotland in the period 1936 to 1949.

of a staff of experts, and (b) to provide a series of lectures on various aspects of the history of architecture by a number of distinguished architectural historians who could not normally be brought together in one place.

The school will be open to students in schools of architecture recognised by the R.I.B.A., and others, on the recommendation of their tutors. Preference will be given to students who wish to make measured studies in preparation for the equivalent of the R.I.B.A. Intermediate Examination. In the course of the fortnight an additional programme of visits to historic buildings in the district will be arranged in conjunction with the York summer school of archives which will be taking place at the same time.

The fee for the school is £4, and applications for admission should be made to the secretary, York Civic Trust (Academic Development Committee), 6, High Petergate, York, not later than June 17.

Halting Ribbon Development.

HOW TO AVOID ribbon development is the subject of a circular sent by the Ministry of Town and Country Planning to all local authorities. Authorities are reminded that land lying alongside main traffic routes should not normally have direct frontal access to the road, and powers of planning control should be rigorously used to prevent this from happening. When there is development in depth in the neighbourhood of main routes, internal estate roads or service roads should be provided.

The only circumstances in which these principles might be relaxed would be in the case of a single site left undeveloped in a road almost built up or an isolated site away from any built up area. The decision then would depend on considerations of road safety.

Luncheon to Mr. W. Eric Rice.

A COMPLIMENTARY LUNCH was given by Mr. T. Harold Phillips, president of the Rotary Club of London, on June 12 at the Savoy Hotel, to Mr. W. Eric Rice, C.B.E., J.P., on his election as Mayor of the City of Westminster. Mr. Rice is a past-president of the Club.

Professional Announcements.

MR. J. V. T. SCOTT (practising in Belfast, Northern Ireland) AND PARTNER, D/Dipl.Arch. A/A.R.I.B.A., Dipl.T.P., A.M.T.P.I., announce that they have opened an office at 15, West View, Douglas, Isle of Man, where trade literature, etc., will be welcome.

MESSRS. W. T. HILLS AND CO., chartered quantity surveyors of 64, Torwood-street, Torquay, wish to announce that they have opened a branch office at 8, Dix's-field, Exeter, at which address they will be pleased to receive copies of catalogues and general technical literature.

MESSRS. ASHFORD AND TROWER, quantity surveyors, of Lowestoft, Suffolk, announce their change of address as from June 24 from 123, London-road North, Lowestoft, to new and larger premises at "London House." The Prairie (next Odeon cinema), London-road North, Lowestoft, to which all communications should be sent. Telephone No. Lowestoft 204. Trade catalogues would be welcomed.

FROM "THE BUILDER" OF 1850

Saturday, June 15, 1850.

THE ELECTRIC LIGHT.—The electric light was lately exhibited from Sunderland South Pier Lighthouse, by Mr. Staites, with the view of adopting it as a permanent means of illuminating the lighthouse and new docks, the latter of which are to be opened on the 18th inst. It is said to be likely, should the cost not prove an obstacle, that it will be forthwith adopted. We should have believed more fully the account of the trial with which a correspondent favoured us, if he had not gravely repeated a report that a sailor lighted his pipe by means of its *rays* and the assistance of a burning glass!

BRITISH ARCHITECTS' CONFERENCE

The New City Centres of Europe

CRITICISM of a number of projected schemes for the reconstruction of city centres in various parts of Europe was made by THE HON. LIONEL BRETT, M.A., A.R.I.B.A., in a paper read at the British Architects' Conference at Bristol on June 9.

After some introductory remarks, Mr. Brett listed three simple rules regarding new city centres: First, they must be planned for the safety, convenience and pleasure of the pedestrian; second, they must be planned for the effective use of the motor vehicle; and, third, buildings, old and new, must be appropriately related with one another.

Following are extracts from his subsequent remarks:—The first thing that must strike anybody who surveys this field is the extraordinary unscientific nature of a great many of the schemes. The damage at Kiel, for instance, though patchy compared with some German cities, is, as far as I can remember, worse than anything in England and certainly enough to justify some fundamental thinking. Yet here is a project for rebuilding full of what I can only call howlers, chaotic in bone-structure and pure murder from the traffic point of view. In all the main roads there are tram lines, and I suspect that a heavy investment in trams has stultified creative planning here just as it obviously has at Cassel, where again trams are an outstanding feature. Unlike Kiel, which grew rapidly and chaotically at the end of the nineteenth century, Cassel, dominated by the most fantastic baroque vista in Europe, had a good deal of the French manner in its street plan, which survives in this project, the chief features of which have existed since the eighteenth century. But once again we find no sign of a traffic ring or of the central precinct such as has become a commonplace in this country. This is the more surprising since German cities, with their mediæval core surrounded in so many cases by a splendid *Ringstrasse*, lend themselves so much more easily than ours do to the kind of planning which most people think is the best way of safeguarding the pedestrian and speeding the motor vehicle.

Plan of Modern Ideas.

If we look at the plan of Dresden, for instance, as it was, we are at once struck by its perfect suitability to modern ideas. Here ready made is an inner ring, a middle ring and a series of useful radials. The railway station is ideally placed on the middle ring, and in the centre of it all is the perfect pedestrian precinct, pretty well impenetrable to wheeled traffic. It would be difficult to spoil such a plan, but if you look at the rebuilding project I think you will agree that it succeeds in doing so. A series of cross-town short-cuts are inserted so as to destroy the usefulness of the two rings, and all blown up to colossal boulevard widths with really terrifying intersections. Pure Haussmann! No roundabouts anywhere. In front of the ugly (1905) Town Hall, which is to be retained, is a monumental piazza which is nothing more than a traffic engineer's nightmare.

I am being severely critical of some of these German schemes because I think it is the business of architects, particularly in so small a peninsula as western Europe, to learn from one another, and here, after all, published years before the Dresden project, was the Coventry scheme, with its deliberate change of scale from the motorists' inner circle to the pedestrians' precinct, its careful avoidance of short cuts and its sensitive treatment of surviving buildings. There are arguments for and against the ring principle, but if one does adopt it this is the way to do it.

This lack of realism and hard thinking is not, unfortunately, confined to Germany. Surprisingly enough, there are examples of it in France. At Tours, for example, there were two obvious bombing targets, the bridge and the marshalling yards. Damage was fairly concentrated, and the town needs a new bridgehead and a new station approach. To move the station back on to the main line was an obvious operating economy, and would clear a substantial sector of the town for rebuilding. The use made of this opportunity has been to create two separate systems of radiating boulevards reminiscent of the Piazza del Popolo. They are unrelated to one another and the radiating boulevards lead nowhere. There is no attempt at a traffic structure for the town as a whole, the new building blocks are arbitrary and uneconomic and there is no recognition of the existence of the motor-car.

Scheme for Rotterdam.

Though the Germans killed fewer people in Rotterdam than the Allies, they destroyed more bricks and mortar, 11,000 buildings in fact, and they left 650 acres, the whole commercial centre of the town, completely clear for rebuilding. This was not an unmixed disaster. The great port, whose prosperity is bound up with that of the Ruhr and the Rhine, had quintupled its population in 60 years and its centre was congested and ugly, with an uninteresting river frontage and a difficult bridgehead problem. So far as the outsider can judge, the new plan meets these difficulties. There is the correct contemporary apparatus of multi-tracked roads, multi-level crossings and roundabouts, and there is a perfectly clear distinction between the traffic routes, which are really generous (wider than the Champs Elysées in some cases), and the little pedestrian shopping streets. Moreover the plan does promise to make something of the river, and to restore to view that gay forest of masts and all the fascinating nautical equipment which gives a lift to the imagination in any port, and which we see crowding the waterfront in eighteenth-century prints. And yet one cannot escape a feeling of disappointment. Those tree-lined boulevards bordered by hollow squares of building could be in Paris, or in Brussels. Given a clean slate, is this the twentieth-century contribution?

We might glance a moment at a great English port, Liverpool, where we shall find planning of the same order. This plan differs from Rotterdam's in its more rigid, perhaps even exaggerated, adherence to the principle of the inner ring, as to the value of which in a dockside town it would be presumptuous for me to express an opinion. It is in the scale and arrangement of building blocks that there is some affinity with Rotterdam.

It will, perhaps, give point to what I am trying to say if we consider a scheme for part of the business quarter of Warsaw. The difference is striking. The nineteenth-century town of boulevards and alleys has vanished from the scene, and we have the "superblock" in its pure form, an oasis bounded by fast motorways. Inside it a complicated formal pattern is worked out, of which the elements are low buildings and tall and the air between them, paved car-parks and gardens, and sharply defined changes of level. Some things about this

scheme are immature, but there is nothing unrealistic about it.

Summing Up.

In summing up his reactions to the various projected schemes, Mr. Brett said:—

I suppose one's first impression is of diversity of aim and style. The argument that our period lacks an architectural style of its own, irritating though it is to the architect and probably untrue, does gain some force from the extraordinary assortment of plans we have reviewed, in which every dead horse from Julius Cæsar to Camillo Sitte is revived by somebody. It is, I hope, a surprise to English architects, who have reached a comfortable if slightly smug unanimity upon their happy mean, to find foreigners still gesticulating wildly and rushing to every extreme. I must say that I am glad they do. Western Europe may look insignificant nowadays on the geo-political map of the world, but it still seethes with more ideas, and expresses itself in more varied accents than either of the vast empires that occupy the rest of the world.

One's second source of surprise, and of disappointment, is at the general conservatism of these cities. *The Villes Radieuses* which many people imagined, and some people actually drew, emerging from the ashes of the nineteenth century, are evidently not going to materialise. Warsaw and Berlin, Rotterdam and Stalingrad are not going to show us a sudden mutation in the evolution of cities. There are two perfectly good reasons for this. The first is that there simply wasn't time for the immense amount of research and discussion which would have beeen necessary for a fresh start to be made. Improvisation is the only way of meeting the aftermath of war, just as it is the only way of meeting its onset. In face of the homeless millions that encamped among the ruins as soon as they were cleared of explosives, the only recourse was to get something up quickly on the easiest available site. Which indicates reason number two—the intricate web of underground services (not to mention tramlines) in which so much of a city's capital is locked up, and which puts a premium on every departure from the existing street pattern.

Among the few points of agreement among the plans is the attempt to make something of the waterfront. A great many cities which owed their origin to a great river or harbour frontage had allowed that frontage to get cluttered up with industrial impedimenta, turned their back on it, and looked in some other direction. Kiel, Tours, Orleans, Rotterdam, Warsaw, Stalingrad, Hull, Le Havre and Maubeuge, as well as London, are examples I have already referred to, and there are many others. It is good to know that this splendid old city of Bristol is one of them, and proposes to place its new public buildings, set among trees and lawns, in the bend of the Avon. Water is architecture's most flattering admirer and slave, and it was high time that it were brought into service again.

Areas Cleared By War.

There are other more obvious improvements facilitated by war damage, and most cities have at least made a gesture in their direction; more generous open spaces, lower densities, ancient monuments set off to better advantage, improved traffic circulation. In many cases, however, the parking problem has not been realistically faced, and in many others the contradictory requirements of the pedestrian and the motor vehicle have not fired anybody's imagination.

If I were asked what is likely to be the most significant change which our generation will make in the character of city centres, I would say that it is the revival of the *piazza*. Even the worst of the schemes we have considered shows more interest in the square than in the street, and the best of them show an awareness of space which has not been seen in Europe since the Baroque. The corridor street, the axial vista and the built-up *rond-point* are on the way out, and there is a new freedom in the grouping of buildings, which tend to form a series of asymmetrical courts. This freedom, which is the greatest possible boon to any designer, is the first legacy of modern architecture to city planning.

But that is about as far as one can go. Common denominators are hard to find, and one comes back to the contrasts. The most significant of them all is in the degree of energy with which the plans are being implemented. Here materials, labour, finance are important, but far more important is the psychological atmosphere. Europe at this moment is a continent without a heart. The German *Mittel-Europa* lies bleeding, its future under the present set-up so uncertain that another war must seem a less fearful prospect to it than to others. The best-planned, best-organised and cleanest cities in Europe are heaps of rubble, and in the present German mood there is no point in doing anything about it. Reconstruction on the scale demanded of Germany requires a heroic effort of the same kind as is needed in war. It needs above all a firm, an unreasoning faith in peace. What is required of all those who build in Europe to-day is an act of faith, and I am sure that this gesture of rebuilding the centres of our cities, which we have yet to make in this country, is itself a contribution to the structure of peace.

The Conference Dinner

THE Conference dinner was held at the Queen's Hall, Berkeley-square, Bristol, on June 9. The President, MR. MICHAEL WATERHOUSE, M.C., was in the chair.

A comparison of the two cities, Glasgow and Bristol, was made by MR. A. GRAHAM HENDERSON, A.R.S.A., V-P.R.I.B.A., when he proposed the toast of "The City and County of Bristol." "Glasgow," he said, "is a centre of heavy industry, but Bristol is engaged in light industry, which not only helps to make the city less difficult to handle architecturally but ensures balanced employment, which is an important factor in a city's development.

"Every city has its traffic problem, and in the case of Bristol it is linked with the damage due to the war. We had the same problem in Glasgow and we are planning mad. I do not suggest that planning is not a necessary and preliminary essential to construction, it must be, but planning has become a sort of popular game. All know about the jig-saw puzzle and the interest everybody takes to find the missing piece, but it should be remembered that it is primarily the architect's job to deal with the planning of buildings and cities."

Giving some details of Bristol's rebuilding programme since the war, the Lord Mayor of Bristol, ALD. F. A. PARISH, C.B.E., who replied, said that in the years since the war they had concentrated on building houses for the people and they were proud of the results of that policy. If Conference members noted a number of uncleared bombed sites in the city, it was due to the decision to use what labour and materials there were available for the more urgent task of building homes.

THE PRESIDENT proposed the toast of "The Bristol Society of Architects," and in the course of some witty remarks on the question as to whether Bath or Bristol should be regarded as the true location of the Conference, reminded the company that both cities had made contributions to English life and language. "All shipshape and Bristol fashion," was a phrase hardly more well known than the famous "Bristol milk," which came from a very strange cow.

Bath had, on the other hand, given a name to the famous bun, as well as to the "Oliver" and also to the Bath brick—that stroke of genius which ensured that if Bath stone could not have a polish of its own, then no other stone should have a polish without a Bath brick.

The President paid tribute to the work being done in all parts of the country by the Allied Societies and expressed his appreciation of the many kindnesses he had received during his term of office. He concluded by expressing his thanks to the Secretary and permanent staff of the R.I.B.A. for all they did for the Royal Institute.

In reply, MR. R. S. REDWOOD, A.R.I.B.A., President of the Bristol Society of Architects, said that venerable age and bulk were sometimes accompanied by failing mental and physical powers, but while this was unfortunately true of some human beings he did not think it could be said of the Bristol Society, which combined the experience of a century of life with the energy of youth. Mr. Redwood continued: "You will recall Machiavelli's advice, 'When doing good, do it little by little; when doing evil, do it all at once.' I pass over the questionable morality of this dictum to say that our opportunities for doing good in an architectural sense approximate to the 'little by little,' and perhaps it is fortunate that our chances of doing evil are bounded by the same limitations — those imposed by circumstances, our client and, in these days, by a beneficent Government."

Referring to the work during the last 100 years of the Bristol Society and to its aspirations for the future, Mr. Redwood quoted: "'What's past is prologue,'" and added that the century through which the Society had passed was but a prelude to the one which lay ahead.

Architects and the City Council.

The Mayor of Bath, COUNCILLOR MISS KATHLEEN HARPER, replying to the toast of "The Guests," given by MR. J. RALPH EDWARDS, A.R.W.A., F.R.I.B.A., said that Bath was indebted to individual members of the Bath Chapter, who were assisting in every way the work of the city council. The architects of the city had formed a special committee to deal with the schools problem and they were also going to give the Council advice on the Roman baths.

THE RT. REV. THE BISHOP OF BATH AND WELLS, who also responded, said throughout the 27 years of his ministry he had had increasing cause to be profoundly grateful to members of the R.I.B.A., not only for the services they had rendered the church but for the way in which they had carried them out. The speaker expressed sympathy with the profession at the frustrating influences which surrounded it today. "It seems to me," he said, "that much of your work in recent years has had to be purely utilitarian in character and that the creative instinct has been denied exercise. I hope the day may not be long when you are set free to create for the future the buildings which past generations have created for us."

CORRESPONDENCE

Building Productivity Team Report

TO THE EDITOR OF *The Builder*.

SIR,—I attended the meeting at Kingsway Hall on Friday evening and hoped to come away enriched with something to think about. The meeting was interesting and well attended, which indicated the awareness of all concerned of the vital need of the industry to improve its production. I have set down my impressions, which I thought may be of interest.

I learned little that I did not already know, for I think it is generally understood that the crux of the present situation is output, and our difficulties will remain until this is solved. It cannot be too firmly impressed upon all concerned that a more determined effort is required if we are to succeed in our efforts.

I had hoped that something useful would have emerged from "Question Time," but after listening to the comments of certain trade union speakers, I had the impression that the questions had deteriorated into politics, which was a pity. It appeared that they failed to face the facts and were not enthusiastic in their support for the proposals under discussion. There seems to be an underlying misunderstanding or resentment in certain quarters, which needs remedying in order to gain the wholehearted co-operation of the operatives.

Mr. R. O. Lloyd seemed to me to touch upon a vital spot when he referred to the price fixing of building materials. We have seen in recent years the gradual elimination of independent firms of brick, tile and cement manufacturers and the formation of strong trade associations covering practically the whole field of building materials, and even in such things as sand and ballast. It is a waste of time to send out inquiries for tendering, because all the quotations come in at practically the same figure. I think this is a bad thing.

There is no longer any competition in the materials market, and although this probably does not materially effect productivity, it certainly has a considerable bearing on building costs. In consequence the competitive element in the industry to-day is reduced to wages.

It is generally admitted that the present rate of production on the part of the operative must be stepped up very considerably. Personally, I feel sure that the present attitude is due fundamentally to a state of mind of the operative towards his work, and what we have to cultivate is an atmosphere conducive to the right frame of mind.

Looking nearer home, I am not an operative, and bonus or payment by results do not enter into my orbit, and yet I work hard, take work home most nights, without thought of reward, the only incentive I have being to improve my position and the personal satisfaction of making the best job I can of the work I do, and I find it difficult to understand any other attitude.

I have contact with operatives with the same ideals and industry is constantly looking for such men. There is enormous scope for advancement among the operatives, and what is wanted is some impetus apart from bonus to encourage in them a desire to improve their status.

There is a psychological aspect to this matter. One finds in most men good principles and sincerity and when they are known personally, most will respond when an effort is required, if they have confidence that their effort will not pass unnoticed; but where there are large numbers of men and personal contact is lacking, something seems to happen and the same atmosphere does not exist.

I have not read the Productivity Team Report, but on glancing through it it seems to give much interesting information.

In conclusion, if contemporary American architecture is exemplified by the photograph on plate No. 5 of the United Nations Secretariat Building in New York, it is not surprising that costs are less there; but may we be spared from this, even at the expense of slightly higher building costs for this type of work, at least, in this country.

BUILDER'S SURVEYOR.

Totteridge, N.20.

Oh! No John, No John, No John, No

TO THE EDITOR OF *The Builder*.

SIR,—A wise architect once said that the worries of his job were like the fleas on David Harum's dog—"They keep him from broodin' on bein' a dog." That is worth remembering to-day when the architectural body has developed a bad bout that has settled upon it in epidemic. With licences, supplementaries, prosecutors, damage-commissions, land-boards, town-planners, and what not, all suffering from an itch to exercise authority by lugubrious refusals, it is only an amused philosophy that will pull us through. And, my word, the delays!

It was a less wise architect who said—on finding one of his buildings, from artesian wells to attics, occupied by an offshoot swarm from Whitehall—"It is regrettable to find this lovely building used for such reprehensible purposes." He watched his remark sink slowly into an abyss of unwilling comprehension for a few minutes, but it was not until leaving that he was asked if he really meant what he had said. He replied gravely—"Yes, especially the words 'lovely' and 'reprehensible,' they are essential to the meaning." This episode, no doubt, kept him from broodin' for a bit.

Will you imagine a scene in a revue? It is a large room in a Ministerial office. Through the windows can be seen Big Ben and part of the Chatterbox Club. There are eight doors up-stage, with one larger and more important door in the centre. Eight desks are crowded into the room at each of which sits a somewhat shabby and shiny-trousered official interviewing visitors on highly confidential business. There is no privacy whatever so that people at other desks can, and do, overhear the conversations at neighbouring tables. Each official has, on his left hand, an enormous "IN" tray piled high with documents, and on his right hand a tiny "OUT" tray practically empty. Forgotten files are piled in the corners and file cabinets are so full that none of the drawers will shut. A huge day-to-day calendar is eight weeks in arrear, and the clock has stopped. Every few minutes a messenger, with gilt crowns on his shoulders, hurries in carrying a tray containing eight cups of tea which he takes to each official in turn, who replaces a used cup with a deep sigh of contentment as he takes the new one. There is a constant come and go, but nothing seems to happen except that one hears from the visitors an occasional—"IT'S FANTASTIC!"—and there is a sound of tearing hair. As Big Ben booms each door up-stage opens in turn, a head pops out, sings a word, and disappears again until its turn comes afresh, until the quarters are finished. As the hour strikes the Ministerial door in the centre opens, the Minister pops his head out, sings his enormous word, pops back and the door is closed. This is what is sung: No, no, no, NO! No, NO, no, NO! NO, NO, no, NO! NO, no, NO, NO! NO-O-O-OH! The officials stand up, bow towards the Ministerial door and sing in hollow harmony one long and final NO-O-o-OH! More tea and files are brought in, and in confusion the "Safety Curtain" falls, on which is written: *Libera Nos A Malo, Amen.*

L'ARCHITECTE S'AMUSE.

London, W.C.1.

BIRTHDAY HONOURS

MR. LEWIS SILKIN, Minister of Town and Country Planning in the last Government, was created a baron on June 8, when the King's Birthday Honours List was published. Mr. John Keay received a knighthood "for services to the china clay and housing industries in Cornwall," and Mr. Terence R. B. Sanders, assistant controller of supplies, Ministry of Supply, became a Companion of the Bath.

Other honours were conferred upon members of the building professions and industry as follows:—

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OBITUARY

P. W. Lovell, B.A., A.R.I.B.A.

We regret to record the death on June 6 of Mr. Percy Wells Lovell, B.A. (Cantab), A.R.I.B.A., F.S.A., of Leicester. A member of Leicester Diocese Advisory Council, he was the compiler of a record of the churches in the diocese. He was Hon. Organising Secretary of the London Society from its inception in 1912 until his retirement in 1939. He was 72.

* Part F has already been published separately as an interim document.

CORRESPONDENCE

Building Productivity Team Report

TO THE EDITOR OF *The Builder*.

SIR,—I attended the meeting at Kingsway Hall on Friday evening and hoped to come away enriched with something to think about. The meeting was interesting and well attended, which indicated the awareness of all concerned of the vital need of the industry to improve its production. I have set down my impressions, which I thought may be of interest.

I learned little that I did not already know, for I think it is generally understood that the crux of the present situation is output, and our difficulties will remain until this is solved. It cannot be too firmly impressed upon all concerned that a more determined effort is required if we are to succeed in our efforts.

I had hoped that something useful would have emerged from "Question Time," but after listening to the comments of certain trade union speakers, I had the impression that the questions had deteriorated into politics, which was a pity. It appeared that they failed to face the facts and were not enthusiastic in their support for the proposals under discussion. There seems to be an underlying misunderstanding or resentment in certain quarters, which needs remedying in order to gain the wholehearted co-operation of the operatives.

Mr. R. O. Lloyd seemed to me to touch upon a vital spot when he referred to the price fixing of building materials. We have seen in recent years the gradual elimination of independent firms of brick, tile and cement manufacturers and the formation of strong trade associations covering practically the whole field of building materials, and even in such things as sand and ballast. It is a waste of time to send out inquiries for tendering, because all the quotations come in at practically the same figure. I think this is a bad thing.

There is no longer any competition in the materials market, and although this probably does not materially effect productivity, it certainly has a considerable bearing on building costs. In consequence the competitive element in the industry to-day is reduced to wages.

It is generally admitted that the present rate of production on the part of the operative must be stepped up very considerably. Personally, I feel sure that the present attitude is due fundamentally to a state of mind of the operative towards his work, and what we have to cultivate is an atmosphere conducive to the right frame of mind.

Looking nearer home, I am not an operative, and bonus or payment by results do not enter into my orbit, and yet I work hard, take work home most nights, without thought of reward, the only incentive I have being to improve my position and the personal satisfaction of making the best job I can of the work I do, and I find it difficult to understand any other attitude.

I have contact with operatives with the same ideals and industry is constantly looking for such men. There is enormous scope for advancement among the operatives, and what is wanted is some impetus apart from bonus to encourage in them a desire to improve their status.

There is a psychological aspect to this matter. One finds in most men good principles and sincerity and when they are known personally, most will respond when an effort is required, if they have confidence that their effort will not pass unnoticed; but where there are large numbers of men and personal contact is lacking, something seems to happen and the same atmosphere does not exist.

I have not read the Productivity Team Report, but on glancing through it it seems to give much interesting information.

In conclusion, if contemporary American architecture is exemplified by the photograph on plate No. 5 of the United Nations Secretariat Building in New York, it is not surprising that costs are less there; but may we be spared from this, even at the expense of slightly higher building costs for this type of work, at least, in this country.

BUILDER'S SURVEYOR.

Totteridge, N.20.

Oh! No John, No John, No John, No

TO THE EDITOR OF *The Builder*.

SIR,—A wise architect once said that the worries of his job were like the fleas on David Harum's dog—"They keep him from broodin' on bein' a dog." That is worth remembering to-day when the architectural body has developed a bad bout that has settled upon it in epidemic. With licences, supplementaries, prosecutors, damage-commissions, land-boards, town-planners, and what not, all suffering from an itch to exercise authority by lugubrious refusals, it is only an amused philosophy that will pull us through. And, my word, the delays!

It was a less wise architect who said—on finding one of his buildings, from artesian wells to attics, occupied by an offshoot swarm from Whitehall—"It is regrettable to find this lovely building used for such reprehensible purposes." He watched his remark sink slowly into an abyss of unwilling comprehension for a few minutes, but it was not until leaving that he was asked if he really meant what he had said. He replied gravely—"Yes, especially the words 'lovely' and 'reprehensible,' they are essential to the meaning." This episode, no doubt, kept him from broodin' for a bit.

Will you imagine a scene in a revue? It is a large room in a Ministerial office. Through the windows can be seen Big Ben and part of the Chatterbox Club. There are eight doors up-stage, with one larger and more important door in the centre. Eight desks are crowded into the room at each of which sits a somewhat shabby and shiny-trousered official interviewing visitors on highly confidential business. There is no privacy whatever so that people at other desks can, and do, overhear the conversations at neighbouring tables. Each official has, on his left hand, an enormous "IN" tray piled high with documents, and on his right hand a tiny "OUT" tray practically empty. Forgotten files are piled in the corners and file cabinets are so full that none of the drawers will shut. A huge day-to-day calendar is eight weeks in arrear, and the clock has stopped. Every few minutes a messenger, with gilt crowns on his shoulders, hurries in carrying a tray containing eight cups of tea which he takes to each official in turn, who replaces a used cup with a deep sigh of contentment as he takes the new one. There is a constant come and go, but nothing seems to happen except that one hears from the visitors an occasional—"IT'S FANTASTIC!"—and there is a sound of tearing hair. As Big Ben booms each door up-stage opens in turn, a head pops out, sings a word, and disappears again until its turn comes afresh, until the quarters are finished. As the hour strikes the Ministerial door in the centre opens, the Minister pops his head out, sings his enormous word, pops back and the door is closed. This is what is sung: No, no, no, NO! No, NO, no, NO! NO, NO, no, NO! NO, no, NO, NO! NO-O-O-OH! The officials stand up, bow towards the Ministerial door and sing in hollow harmony one long and final NO-O-o-OH! More tea and files are brought in, and in confusion the "Safety Curtain" falls, on which is written: *Libera Nos A Malo. Amen.*

L'ARCHITECTE S'AMUSE.

London, W.C.1.

BIRTHDAY HONOURS

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BUILDING PRODUCTIVITY

First Public Meeting in London

SOME of the principal members of the building industry's Anglo-American Productivity Team gave their impressions of their visit to the U.S. at a well-attended public meeting held in Kingsway Hall, London, on June 9. MR. RICHARD STOKES, M.P., Minister of Works, presided, and the speakers included MR. ROBERT O. LLOYD, O.B.E., president, N.F.B.T.E.; MR. ROBERT H. MATTHEW, A.R.I.B.A., architect to the L.C.C.; MR. F. W. BEAZLEY, of the N.F.B.T.O.; and MR. RICHARD COPPOCK, general secretary, N.F.B.T.O.

MR. STOKES, in his opening remarks, said that the report of the building industry's team formed one of many which heralded a new era in the possible rate of human progress. It meant that a general realisation existed of the importance not only of pooling material resources for the common end, but the pooling of ideas and "know how" in manufacturing processes. Without such probing there could be little hope of achieving the rate of improvement we all desired to see with the consolidation of the civilisation in which we all believed and which did not exist merely for material progress.

There was much which we could learn from our friends in America and which they could learn from us: it was essentially a two-way effort. The object of the exercise was to get production up and costs down with benefit to all.

MR. ROBERT O. LLOYD said that he knew that the object of the present controls which restricted the building industry so much was to guide and assist, but the industry had had five post-war years of such guidance and should now be allowed to make its own progress unaided.

"I want to make it quite clear," he continued, "that we do not advocate in our report the removal of all controls. What we do say is that Government Departments responsible for licensing and materials and other controls should continually keep under review the possibility of relaxing or eliminating them, so as to facilitate development and reduce unproductive paper work."

The American building worker had never acquired a habit of doing less than he was capable of doing. It was misapprehension, however, to think that the building operative in the United States was in any sense of the word "slave-driven." There was no sense of undue speed or hurry, but an all-round efficiency and no waste of time. The positive stimulus which made the American building worker so efficient was his desire to improve his position. There was, of course, also the negative stimulus of the fear of unemployment.

In this country we were endeavouring to provide the necessary stimulus for higher production under our conditions of full employment by the widest possible use of bonusing schemes. These schemes by themselves would not solve our difficulties unless there was a change of attitude on the part of each individual. We needed a spirit of determination to tackle this whole question.

MR. ROBERT H. MATTHEW said that it was significant that the contractor and the operative members of the Team gained even more solid impressions of the relative efficiency of the American architect than did the architectural members of the Team themselves, while at the same time, the professional members were immensely and particularly struck with the very high level of efficiency of the contractors' organisation in America, compared with our own experience at home, even before the war, when controls, rations, priorities and the rest were unknown. What this added up to was a unanimous appreciation of an overall level of efficiency, from top to bottom of the industry, from which we could learn a very great deal, and indeed, which we could ill-afford to neglect.

Referring to the application of lessons learnt from the Americans, Mr. Matthew said:—"As our economic and social background differs so much from America, we must, out of our own circumstances, produce our own solutions. Perhaps this is saying no more than the obvious, that no one expects the American way of life to be transplanted and to flourish here, but I would go one step further, and say that out of our necessity to plan at high level, and not only in relation to the particular building job, can come our greatest hope of substantial advances in building technique and consequently in overall reductions in cost.

MR. F. W. BEAZLEY said that the answer to the vital question of increased productivity was not to be found in mere exhortations to the operative to work harder. The time for "pep" talks had passed. The importance of an overall, collective, planned effort by everyone in the industry—including the building owner—could not be over-emphasised. The whole future of the industry, the maintenance of the living standards of those employed in it and any hope of improvements in the future depended very largely upon ability to raise the rate of production and keep costs at an economic level. It was futile, however, to expect the industry to raise its rate of production and reduce its costs unless those in authority did all they could to help.

In the discussion which followed, MR. ALISTER MACDONALD, F.R.I.B.A., who said he had also had experience as a clerk of works and a building operative, replied to those who, earlier in the meeting, had accused architects of standing aloof. He said that if operatives on the site would agree to open their doors to the architect they would find him the best of comrades. Little progress could be made until builders and architects got together and demanded that their employers, whoever they might be, should make up their minds what they wanted and should allow architects the necessary time to prepare their plans, so that they could work out all the details and hand the complete set of drawings over to the contractors.

Emphasising that pre-planning was, in his opinion, essential to obtain higher productivity, Mr. MacDonald said that what British architects called working drawings were considered in America to be only sketch plans.

Another architect, MR. C. J. CAMPBELL, said that he was not convinced, despite what he had heard from various members of the Productivity Team, that the building worker in America was possessed of some indescribable, magical force which urged him to work harder than his British counterpart. He could not believe it because it was not consistent with human nature, and he went on to draw attention to that part of the report which referred to the incentive to the American operative provided by the knowledge that many others were available to take over his job if he did not work efficiently.

Good organisation was also another extremely important part of productivity, and, in view of the fact that it had been admitted that the architect was a key member of the building team, he considered that more should be made known in this country of the organisation of American architects' offices.

MR. J. SLOUGH, a building employer, said that the system of incentives had not yet had a fair chance. Time after time employers had tried to put schemes into successful operation, but usually found that the operatives did not understand them. Referring to the timber shortage, Mr. Slough expressed the opinion that if builders were given an assurance by the Government that adequate timber supplies would be available, building costs would come down by 10 per cent.

The American operative, the same speaker continued, had the incentive of fear. He feared losing his high standard of living. His employer, too, feared that if he did not keep up with his schedules, he also would be out on the breadline.

Replying about the supply of materials, MR. STOKES said that timber supplies were dealt with by the Board of Trade, but he understood that in a very few weeks' time an improved flow of timber would be coming into the country. At the moment the Timber Controller was abroad endeavouring to speed up negotiations. So far as cement was concerned, 85,000 tons were being imported at the rate of 6,000 tons a week, and this, it was estimated, would meet the demand until our own cement works were able to cope.

That frustration was widespread among operatives was a view expressed by MR. JACK LLOYD, a Battersea painter. Although wages were frozen, he said, profits were reaching all-time records. He also criticised the Government's cuts in the housing programme, which, he said, resulted in unemployment in the industry.

The subject of capital investment expenditure was later taken up by Mr. Stokes, who said that the only statement he was able to give the industry was that the number of accommodation units to be built next year and in 1952 was 200,000.

MR. A. LOUGHTON, a bricklayer and member of Wandsworth Borough Council, said that it had been his experience during 28 years in the trade that wherever there was good management men worked hard.

He suggested, too, a reduction in the interest paid on capital loans. On a recent £50,000 housing contract in Wandsworth wages totalled £13,000 and interest and loan repayment over 60 years £148,000.

Replying to a question about the education of foremen in America, MR. ROBERT LLOYD said that America's training schemes surpassed those available in this country and he pointed out that every operative in the U.S. stayed at school until he was 17 or older and had, therefore, had a good general education.

Exchange Visits.

The National Federation of Building Trades Employers inform us that they regularly receive requests from Western Europe for introductions to their members who would be willing to take into their homes during the summer months boys and girls wishing to improve their knowledge of English. The Federation also receives inquiries from young men learning the trade abroad who want to come to England as pupils in a building firm. These boys and girls are often the sons and daughters of members of building federations on the Continent, who express willingness to receive the sons and daughters of members of the N.F.B.T.E. in exchange. Those interested in exchange visits of this kind are invited to get into touch with the Secretary, N.F.B.T.E., 82, New Cavendish-street, W.1.

HOUSE BUILDING COSTS

Can They Be Reduced?

SOME of the less well recognised factors influencing the cost of housing to the nation to-day were enumerated on June 10 by MR. R. R. COSTAIN, C.B.E., President of the London Master Builders' Association, when he addressed the Housing Conference convened by the Housing Centre at Brighton.

Mr. Costain began by saying that he spoke as a private individual who had spent the whole of his working life in the building industry and that his remarks were applicable to houses only and to the small and medium-sized builder in particular. He continued:—

If we are to consider reducing the cost of housing, I think my first duty is to try to define the word "cost." Used in this particular sense, it is certainly not the figure given by the Ministry of Health to local authorities at, say, 24s. 6d. per foot, inclusive of outhouses; nor is it 24s. 6d. exclusive of all those amenities that the wit and ingenuity of man may describe as "extras." The cost of houses, in the sense that we must consider it to-day, is the cost to the nation. In view of this, the cost certainly starts in Parliament, as the number of debates on housing policy that have taken place in Parliament must have cost the country a considerable amount of money.

Further, the industry has, since the inter-war years, acquired a new Ministry—the Ministry of Town and Country Planning—and quite a considerable portion of the expenses of this Ministry must be allocated to the cost of housing. The Ministry of Works has a very large staff employed on guiding the policies laid down by Parliament and dealing with the materials side of the industry. The Ministry of Health has extended its original organisation by setting up regional offices to keep in close contact and instruct local authorities on the general trend and policy of the Government. The Ministry of Supply was, and the Ministry of Labour and the Board of Trade are, closely concerned, and even the Ministry of Food must be consulted on the question of canteens, etc. In fact, practically every Government department has some function or other connected with the building of houses.

Many people criticise members of Government departments for all the red tape and consequent delays that these formalities create but it must be remembered that civil servants are required to carry out specific instructions and my experience of them is that the majority are extremely competent, conscientious and hard-working people.

Continuing our consideration of the non-productive bodies involved in present-day housing, we find that local authorities have very much larger staffs than before the war. I understand that the local authorities are fully appreciative of this, as they are instituting inquiries into their man-power question.

A considerable number of local authorities have set up housing committees and these are frequently the cause of delays and unnecessary complications.

It is quite true that the members of the housing committees give their time voluntarily to this problem but I am drawing attention to the number of officials engaged upon dealing with the situation.

It may be argued, and argued rightly, that by this consideration by a committee one is assured of a better-finished article; that all this expense is justified in order to ensure that the policy of the Government is being carried out properly, that materials are not employed extravagantly and that the houses are being built to the correct standard and in the best possible manner.

Please do not assume, from what I have said, that I object to people making suggestions for improving the houses and making life easier for the housewife. The only way to build houses economically is stressed in the recently published reports on building: to have all the drawings complete and all materials ordered prior to the commencement of building and to ensure, as far as possible, that these materials will be delivered at the time required. You have no idea of the frustration caused to the contractor and his men, and the consequent inevitable extra cost incurred, when they have to alter work that has already been carried out.

Road Costs.

Referring to the cost of roads, which had risen from £60 per house before the war to £150 to-day, the speaker said that the Ministry of Health, in its Housing Manual, had made some recommendations on road construction and layout which he would have thought would have been of a sufficiently high standard, and he hoped that local authorities would see their way to accepting those recommendations.

Continuing, Mr. Costain said: You may say, of course, that we want 1,000-ft. houses; that we want semi-detached houses with downstairs lavatories and large outhouses, magnificent roads, and so on. That is the ideal, of course, but all these things cost money, and, if we insist on them at the present time, must reduce the *number* of houses built.

May I now talk about the industry itself? We are faced with a situation of full employment, and I am a very keen supporter of this policy. I consider that the building operative has been one of the most harshly treated workers in this country. In the past, unemployment was imposed on him and he had to travel considerable distances, possibly living away from his home for long periods, in order to find work. Now, the men have travelling-time allowances and there are incentive schemes working all over the country, but, quite frankly, the output of the building operative is not as high as it was pre-war. It ought to be, and I believe that over a period of time the operative will adjust himself to his new status and regain pride in his work as regards both quality and quantity.

Even if the operative's output was the same as pre-war, however, and other conditions were similar, without incentives, the labour cost would be twice as much as it was before the war. Add to this figure the additional cost of materials and these two items together would more than double the cost of a house above pre-war level. Again, in the old days, the builder's overheads were possibly 1½ per cent.; now his overheads have increased to between 6 per cent. and 7 per cent.

To sum up the position as it is to-day, we are building very much larger houses, and more expensive ones; we are not getting the output from the operatives that we got pre-war, in spite of the fact that we are paying them more money. Things cannot go on as they are. Rents are too high; subsidies are an increasingly heavy burden on the community, and we shall soon find that although people are desperately in need of housing accommodation, they cannot afford to live in the houses that are being built at present.

Can this be altered? I believe it can, but it must be appreciated that the builder is neither a crook nor a fool and he must be allowed more initiative. We must get out of our minds the idea that to set up a committee is the most satisfactory way of solving a problem. We have got to cut out unnecessary control of planning and supervision of work. We have got to admit the wisdom of certain controls, and we have got to realise that certain materials are in short supply and also the necessity of seeing that the houses go to the most needy. Can we permit initiative and yet have these limiting restrictions?

While leaving the contracting side of the industry and local authorities to deal with slum clearance by erecting blocks of flats, let us remove all restrictions from houses built up to a cost of £1,500, provided that not more than 1½ standards of timber are used per house. Let it also be made a condition that the local authority can buy from the builder up to a certain percentage of the houses built. This would enable the local authorities to rent the houses to the most needy people, and would also permit those who wanted to buy and own their own houses to do so.

There is, of course, the most difficult problem of how the builder can purchase the land on which he wants to build. We cannot, I am afraid, suggest that the Town and Country Planning Act should be abolished. I believe that this difficulty could be overcome by the local authorities using the 1936 Housing Act, which enables them to purchase land and then sell or rent certain areas of this land to contractors. All this sounds very simple and easy, but I believe that it would have a considerable effect upon the cost of housing.

You may say that too many houses would be started under this method. That would not be so. If the builder is not going to get payment for the house until it is completed, he is not going to be foolish enough to start building until he can see a reasonable opportunity of completing his houses. He would, by owning or renting a large tract of land, be able to see continuity of employment, both for himself and for his operatives. He would be able to plan his future, and to use his initiative.

He would have to maintain a standard of building to local authority bye-laws, and also to the rules laid down by the Federation of Registered House-Builders, to which the majority of reputable house-builders belong. Above all, it would restore individualism.

You may, of course, say that I have not criticised the builder at all for the present high cost of building, but I never blame a horse for not winning a race when it has an extra three or four stone to carry.

Present Standards Too High

THAT until the private enterprise housebuilder was allowed to build on an effective scale, housing costs would remain at their present high level, was the view of the Eastern Federation of Building Trades Employers, as expressed by the President, MR. J. W. CROFT, in his half-yearly review at a general meeting of the Federation, on June 6. "The subject," he continued, "has occupied our attention for a considerable period and our regional house-

builders' committee have been very active on the subject of housing designs which would incorporate our suggestions based on past housebuilding experience for keeping down housing costs." Speaking of housing standards, Mr. Croft said: We hold the view that in relation to our material and financial resources, present housing standards are too high. There is increasing evidence to show that rents now being charged for council houses are more than some of the prospective tenants can afford. The present subsidy is high and the burden on the exchequer is great and, with no real prospect of an early reduction in housing costs, we consider that the Government must face up to a problem which they have ignored for a considerable time.

On the subject of apprenticeship, Mr. Croft said: The present rate of intake is approximately 900 per annum and is higher than in previous years. It is estimated that under 40 per cent. of the lads learning a craft in this region are not properly indentured, and the chairman of the regional joint apprenticeship committee has sent an appeal to all employers on this point. There is a satisfactory intake of carpenter and plumber apprentices, but more lads in the crafts of bricklayer, painter and plasterer are required. From statistics available, it would appear that in our region the number of lads learning a craft, whether indentured or not, does not fall very far short of our target figure of 1,400 per annum. It is hoped that the decision of the federation to make available three awards of £25 each this year will be an encouragement to apprentices in furthering their craft training.

INQUIRY BUREAU

Dry-Rot in Tenanted Property

Q.—I have a relative holding a residence in the home counties on a tenancy agreement, the repairing covenant of which states that the tenant shall "keep the interior of the premises . . . in good and tenantable repair."

The position is that a serious case of dry-rot of the *merulius lacrymans* variety has developed in one of the internal door frames adjacent to an external wall. I do not know how long it has been developing, but it has only become visually apparent during the last three months.

There are one or two factors which may have been a contribution to the outbreak, viz.: (1) A broken w.c. pan sustained by war damage in 1945. (The ceiling below the pan and over the affected door was saturated.); (2) The external brickwork (14 in. solid) is in typical London yellows and was built towards the end of the last century. This is in need of repointing and the face of the individual bricks are cracked and crazed; and (3) A broken eaves gutter above allows roof water to run down the external face of the wall.

There is no statement in the tenancy agreement as to the responsibility of the landlord, and there is no mention of the tenant being required to do external repairs. The property was originally under private occupation until 1940 when my relative acquired it under the agreement referred to. The period of the tenancy was originally for three years, but I understand that since the tenant has continued in possession, the agreement remains in force as a tenancy from "year to year." The property was sold to a new owner in 1945, who took over the landlord's responsibilities.

In 1945 the property suffered slight war damage (previously referred to) and I understand that the repairs to the w.c. were met by the War Damage Commission, the claim being signed as "incomplete."

My particular anxiety is in regard to the dry-rot item and I understand that this can generally be assumed to be a "structural" defect and as such would not be the responsibility of a tenant in possession.

Your opinion on this point would be very much appreciated. Would you advise a solicitor or a qualified surveyor (or architect) as being the method of approach to the landlord?

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A.—A legal correspondent writes: In my opinion, under the repairing covenant, the tenant would be *prima facie* liable (on the authority of *Proudfoot* v. *Hart*) for either making good the damage to the door frame, or, if that is not possible, renewing it.

I understand that the terms of the covenant are, by agreement, applicable to the yearly tenancy now set up, but as the same tenant is in possession, the liability is unaltered.

If it be possible to prove that the condition of dry-rot was latent at the time the lease was granted (i.e. actually existed, and this would be difficult to prove), and became patent during the tenant's occupation, then the tenant's liability would be removed. The lease, I am told, does not fix the liability of the landlord so, though there is an obligation on neither party to do anything, the landlord would probably remedy the disrepair in order to preserve his own property.

If (assuming the tenant's *prima facie* liability) it is possible to prove (and this may be difficult) that the condition of dry-rot is due to one or more of the causes mentioned, and which are not his responsibility, then the tenant would be relieved of any liability to repair.

I presume the landlord has as yet made no claim and the tenant wishes to anticipate such a possibility by setting negotiations on foot. If this is the position then the services of a surveyor might be useful if he gives an opinion as to the root of the trouble: should, however, the matter come to litigation, the services of a solicitor will, of course, be necessary.

Has the tenant, to save inconvenience and possibly expense through legal action, considered the renewal of the door frame at his own cost—surely not a very expensive matter? This is not a legal solution of a difficult matter, but in the long run it might turn out to be a simple and inexpensive one if the landlord insists on the tenant's liability and the matter goes to litigation.

Staining Brickwork

Q.—I have a house built of sand-faced bricks, the colour of which is buff, and I am anxious to know if there is any colour preparation obtainable which could add a deeper tone of golden brown stain to the brickwork. Also is it possible to stain plain concrete slabs yellow or brown?

A.—A sand-faced brick is usually absorbent, particularly those known in the south as London Stocks. To colour these it is necessary to wash or brush down the brick work thoroughly so that the dust will not absorb the colour; it will also be necessary to rake out the joints for repointing. To colour buff, dissolve 1 lb. of copperas in five gallons of water, add a small portion of lime (this should be slaked before putting in). For extra colouring use dry yellow ochre and to get the golden brown add a small amount of dry umber. Try out a sample portion on the brickwork and allow to dry. The liquid, when ready, should be put on with a grass brush. Two coats may be necessary. The pointing can be executed with white Portland cement and silver sand.

With reference to the plain concrete slabs, I recommend a proprietary brand* of liquid surface tinter. This should be mixed with a colourless transparent waterproofing liquid. If the bricks are of the hard variety use this tinter in preference to the material already suggested. Alternatively, a waterproof stoneface composition could be used. It should not be difficult to obtain a golden brown colour.

G. W. H.

Additional Excavation for Working Space

Q.—We should be obliged if you could help us in giving a decision on excavation. The following is an extract from a bill of quantities: 258 yds. cube. Excavate for trenches for wall foundations, not exceeding 5 ft. deep; deposit in heaps and part return; fill and ram after walls are set.

This applies to a school now in course of erection, where the excavation is for a 9-in. wall and concrete foundation, the width of which is 18 in. We have excavated for the trench for a width of 18 in. and laid the concrete for the foundation, and have now requested the architects to allow for increasing the width of the trench for the purpose of the bricklayers working in the trench as working space.

The depth of the trench is approximately 5 ft., and we maintain that the additional excavation for working space must be included in the measure for excavation to trenches. The architects state that the excavation is taken out as net and we must stand the cost of the additional excavation. This request we are opposing on the grounds that nothing in the preamble to the bill for excavator nor any definition in the bill relates to such narrow trenches for 9-in. walls.

We shall be obliged, therefore, if you will kindly state whether you consider us in order for persisting in our claim for additional excavation for working space.

PUZZLED.

A.—May I first point out that the following is an expression of opinion and not a decision on the question raised. The architect is no doubt basing his statement on the S.M.M. Excavator, clause 3 (a), whereas "Puzzled" feels that the second paragraph of clause 3(b) should apply.

I am of the opinion that to give working space to one side of the proposed wall was essential and that to do so it was necessary to excavate the trench to a greater width. Therefore, the claim for additional excavation and return, fill and ram, is justified, provided that the brickwork has not been described in the bill of quantities as executed overhand.

V. C. A.

Improving Derelict Land.

The Ministry of Town and Country Planning, in a circular, has called attention to the powers which local authorities have under the National Parks and Access to the Countryside Act to plant trees, bushes, flowers or grass, or to improve the appearance of derelict land.

These powers apply in the whole of England and Wales. Planning authorities, the circular suggests, should consider where they can use these new powers to improve or conceal unsightly development or derelict land.

*Names of various proprietary materials have been forwarded.—ED.

COLONIAL DEVELOPMENT

Recent Achievements and Future Plans

ON February 3 last, the government of Southern Rhodesia raised a new loan on the London Market. The main purpose of the loan, which is being supplemented by internal borrowing, is to help finance Southern Rhodesia's Four-Year Development Plan, which calls for a programme of communications, agricultural and irrigation projects, and public utilities—chiefly electricity supplies. The plan, which has been approved by the Southern Rhodesian Parliament, estimates expenditure of £48 million over the four-year period (April, 1949, to March, 1953). A considerable part of the cost of the plan will be met from local resources, including budget surpluses. Only expenditure on capital works is included in the plan, which covers the requirements of all the local authorities in the country. It is expected that £13½ million will have been spent by March of this year, leaving some £34½ million to be spread over the following three years.

The following summarises the amounts to be allocated under the various heads in the Four-Year Plan. Government Departments, including Public Works, Roads, Irrigation, Telegraph and Telephones and Agriculture—£22,594,000. Statutory Commissions, excluding Rhodesia Railways but including Electricity Supply Commission, National Building and Housing Board (£3,500,000), and the Rhodesian Iron and Steel Commission — £13,406,000. Salisbury and Bulawayo City Councils — £8,000,000. Other local authorities—£4,000,000.

Colonial Higher Technical Education

IN ORDER to obtain expert advice on the expansion of higher technical education in the Colonies, which is an important factor in their development, the Secretary of State for the Colonies has recently appointed a Committee with the following terms of reference: "To advise the Secretary of State and any responsible authorities in the Colonies on the development of Colonial Colleges of Arts, Science and Technology and to advise on expenditure of Colonial Development and Welfare Funds allocated for this purpose."

One of the first items with which the committee will be concerned is the establishment in West Africa of two new colleges. One will be at Kumasi in the Gold Coast (and will incorporate the existing Achimota Teacher Training College); the other will be a tripartite organisation in Nigeria with branches in the three regions of the territory. They are designed to become centres for cultural and technological development, and for the encouragement of the arts and crafts.

New Industries in Trinidad

DURING the past few years a number of new industries have come into being in Trinidad, and are beginning to make a valuable contribution to the Island's economy by employing local labour, using local resources, and, in certain cases, contributing to the Colony's export trade or enabling a saving in dollars to be made. A new box-manufacturing industry, which is expected to meet the demands of most other West Indian islands, in addition to Trinidad's, will employ 300 local men, and the use of local woods will provide Trinidad's Forest Department with additional royalties. At the end of 1949 the Colonial Development Corporation were making investigations into the possibility of establishing a cement industry in Trinidad.

Uganda's Industrial Development

SPEAKING of Industrial Development, in his address at the opening of the twenty-ninth session of the Uganda Legislative Council in December, 1949, the Governor affirmed his faith in the benefits which will be derived from the erection of the dam and hydro-electric station at the Owen Falls. He stressed the fact that, without a supply of cheap power, industry would not be attracted to Uganda, and no other source of power such as coal or oil had been discovered. Uganda had, in Lake Victoria and the Nile, a tremendous potential asset and it was essential that it should be utilised.

In this connection it has recently been announced that housing for 1,000 Africans who are to work on the scheme is now ready, and the Uganda Electricity Board has entered into a contract for the construction of 36 flats and a hostel comprising 20 bungalows, together with a recreation centre.

It became clear early in 1949 that the supply of adequate quantities of cement for the work would present difficulties, and the Electricity Board has therefore been entrusted with the establishment of a cement plant which is expected to be in operation in the middle of 1951.

The main contract for the building of the dam was awarded, in September, 1949, to a group of British and Dutch firms.

West Indies University

WORK on some of the most urgently needed buildings of the West Indies University in Jamaica—such as laboratories, the library, one or two halls of residence, and the teaching hospital—has begun. A number of staff houses have already been completed and occupied, and other buildings have been converted into bed-sitting rooms for the new undergraduates.

Accommodation for Colonial Students

ONE of the main tasks in connection with the increase in number of Colonial students studying at Universities and Colleges in the United Kingdom will be the organisation of accommodation. The British Council is taking over, for the present, the Colonial Office hostels in London, Edinburgh and Newcastle, which together house about 460 students, but its policy is to replace or adapt them to provide accommodation approximately to that of university halls of residence. As, however, only a small proportion of the total number of Colonial students can be so housed, the Council will also make every effort to obtain suitable accommodation in boarding or private houses, and to this end staff have been appointed in London and other British Council centres.

Colonial Bauxite Production

IN NORTH BORNEO, the British Aluminium Company has prepared a scheme for an aluminium factory using local bauxite deposits, and this is now being considered by the Government. Prospecting is in progress both in North Borneo and Sarawak.

Pakistan's Industrial Development

ON MARCH 13, Mr. Ghulam Mohammad, Pakistan's Finance Minister, introduced the estimates for Pakistan's budget for the year 1950-51. On the development programme, the Finance Minister pointed out that Pakistan was undertaking surveys of the vast natural resources and the possibilities for development in the country.

In the year under review, considerable advances in industrial development had taken place. In the field of private industry, four new textile mills had started production and a fifth would go into production shortly. A woollen mill at Karachi had started production, and three others were planned for different centres. Work on a 50,000-ton sugar factory at Mardan, which would be the largest in Asia, was almost completed. There had been rapid developments in the tobacco, tanning and leather goods industries.

The Government had decided to set up a paper mill in East Bengal, and Canadian and Swedish experts had reported favourably on the feasibility of establishing this on the Kernafulli river. Work would be started shortly, and completed in two and a half years.

The prospects of the fertiliser industry have been studied by two expert missions, one from the United States and the United Kingdom, and the other from Belgium.

Of the other Government schemes, the Development Board, which was set up for co-ordinating the various schemes and assigning priorities, had so far approved 105 schemes, which covered a wide field, including irrigation, agriculture, industry, generation of power, and

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health. Work on many of these schemes had already started.

There were other schemes to be financed by the Provincial Governments from their own resources. Notable among these was the multi-purpose Thal Project of the Punjab, and the hydro-electric and land reclamation schemes of the North-West Frontier Province and of East Bengal.

To enable the provinces to finance their productive development schemes, loans had been made available to them by the Central Government.

Electric Power Scheme, Cyprus

THE Governor of Cyprus, SIR ANDREW WRIGHT, in his address to the Executive Council in March, in which he outlined the 1950 development programme, announced that work on the new electricity grid scheme for Cyprus had now passed the preliminary stage, and tenders had been invited for the construction of the main power station.

Contracts to the value of £2 million have been placed in the United Kingdom for the civil engineering and building work in connection with the new power scheme. The work will be carried out in stages: the first stage, which is now in hand, is expected to be completed by November, 1951.

Outlining other plans for public works expenditure during 1950, the Governor referred to 14 new items of which the chief were a new police training school on the outskirts of Nicosia and the erection of an important bridge on the main Limassol-Paphos road in the south-west.

Schemes for Fiji

SCHEMES of development in Fiji include the provision of feeder roads to cost £F445,000 and the Navua River hydro-electric scheme for which £F566,000 has been set aside. About £F246,000 is to be spent on a modified version of the plan to set up a Suva Medical Centre, together with further grants for extensions to existing hospitals in Fiji, and to the Leprosy Colony at Makogai, and £F100,000 is allocated to the rebuilding of the Queen Victoria School—a secondary school for Fijian boys.

The Development Plan funds further include a grant of £F340,000 for the International Airport at Suva. About £F175,000 is estimated for road expenditure, which should be understood to mean road communications between centres of population, as distinct from the grant for feeder roads, which are built solely to open up new areas. Other grants include £F250,000 for port accommodation and a new slipway at Suva. Plans have been drawn up for a structure designed to carry ships of 1,000 tons.

THE PREPARATION OF CONCRETE AGGREGATE

DETAILS of the processes involved in the preparation of concrete aggregate were explained by MR. R. E. POCHIN, A.I.Mech.E., in a paper read at a joint meeting of the Reinforced Concrete Association and the Institution of Structural Engineers in London recently.

Mr. Pochin began by referring to the materials of which concrete aggregate may be composed, and then dealt specifically with crushed stone aggregate. Following are extracts from his remarks on this latter subject:—

The stone, having been won from its bed, should be of a size to be loaded by mechanical shovels into whatever form of transport is installed to carry it to the crushing plant. The size of shovel will depend on the tonnage required and the mouth opening of the primary crusher. This latter is important since in modern practice the crusher mouth sometimes corresponds in size not with the tonnage but with the size of the feed. In other words, the larger the machine within reason, the less is the amount of labour involved at the face in secondary blasting. The sizes of the crusher and shovel are, however, intimately linked, and the shovel driver who, by his ability to observe and reject pieces of rock too large for the crusher mouth, can prevent blockages, and the consequent surge or restriction of the input is one of the most important factors in the chain of mechanisation. Because of the punishing duty imposed on the shovel, it is usual to employ as big a machine as is practicable.

The present tendency is to load at the face into heavy-duty diesel tipping lorries which link the face to the initial unit of the crushing plant. This link should be as short as possible, but, naturally, as the quarry face recedes the length increases by the same amount. Modern practice tends to divorce the primary crushing unit from the remainder of the plant by bringing it right into the quarry, adequate protection being provided during blasting.

Primary Crushing.

With few exceptions, primary crushers are of two types, gyratory and jaw machines of the double-toggle or Blake principle. In this country the latter is generally favoured because, output for output, it will accept a bigger size of feed piece, although in large installations of upwards of 200 tons per hour the gyratory crusher is installed. This machine is an adaptation of the old coffee mill, a vertical eccentric shaft giving it the necessary crushing or breaking action. It is largely employed for ore reduction in the mining industry, where large output is required and the shape of the product is of no consequence. Its vertical height is sometimes a disadvantage, but, since it is best choke-fed, it does not require mechanical feeding. This latter is, however, a disadvantage in small installations, since, as has been indicated above, size of feed and output are not always related.

The double-toggle jaw crusher is widely used for the reasons stated above and also because it produces a good cubical sample without too much dust or smalls.

Mechanical feeding of jaw crushers has become increasingly popular through mechanisation at the quarry face and the development of large gravel deposits. In most large quarry installations and in all gravel pits an automatic feeder is the first unit in the quarry plant proper, and it is also largely used to control and balance the material during its flow through the more elaborate installations. It provides a stabilising and equalising device to ensure a steady flow of material throughout its journey within the plant. Irregularities and fluctuations are bound to occur in machinery of a composite nature, and alternative methods of working, by-passing or re-processing must be provided. This calls for some form of reservoir within the process which can be fed back into the circuit as required at an even and regular rate. There is also the problem of stocking large quantities of crushed aggregate calling for conveyors and bins or stock piles, and these generally need some form of automatic feeding. These demands have called into use various types of mechanical feeder, from the machine that will handle quarry-run stone into primary crushers to those that are capable of both feeding and measuring material to the fineness of flour at rates up to 200 tons per hour.

Mechanical automatic feeders may be roughly classified according to their duty. The Apron feeder, consisting of steel plates mounted on chain running in an open-ended trough, is generally employed with primary or secondary crushing units. They are extremely heavy and rugged machines capable of handling anything that a mechanical shovel can pick up. Similar machines are used to handle any large-size material, but are less rugged as the size of the pieces decreases. Belt feeders, which are machines of a similar type but have a heavy rubber belt running in a trough, are widely employed as the primary feed for gravel plants. They are also frequently used to deliver broken stone from bins to conveyors. Their advantage over the Apron feeder is that they can operate faster and consequently handle a greater tonnage, size for size. Several other types of feeder are available, particularly for fine material, such as reciprocating tray feeders, table feeders and screw conveyors. Besides these mechanical methods, there are electrically pulsated machines for most duties. Their employment seems to be increasing, though they are not widely used in the quarry industry. They have, of course, the advantage of having no moving parts.

The important point to be remembered in feeding any material is its tendency to bridge; consequently, no restriction in the form of a door on these

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machines is to be recommended. The only control of the output should be the speed of the machine which, in most of those mentioned, can be varied at will. Another important point is that the feeder should be capable of being stopped instantly if necessary.

Dirt Elimination.

The elimination and disposal of dirt are commonplace in the preparation of gravel aggregate, but it is only since the introduction of mechanical handling at the quarry-face that the quarry-man has had to face the problem. When all stone was man-handled, and consequently hand-picked, dirt coming down with the stone could be left on the floor to be cleared away later, but however good a mechanical shovel driver may be he cannot be sufficiently discriminating to avoid dirt being mixed with the stone. Quarries vary considerably in the amount of dirt encountered. Some of it must perforce go forward to the plant, and this has necessitated the introduction of dirt-eliminating apparatus. This is sometimes incorporated in the automatic feeder in the form of a Grizzley, either static or vibrated, but since dirt may adhere in crannies or recesses of the uncrushed stone, some quarries prefer to screen after the primary crushing. In such case a rotary cylindrical rumbler or dry scrubber is often used, the size or holes or slots in the cylinder depending on the nature of the rock and weather conditions. In summer it is often an advantage to use a smaller hole than in winter. The argument that a greater quantity of stone will be lost if the process follows the primary crushing seems to be outweighed by the fact that this method is much more effective and yields a better final sample. In any case, a jaw-type primary crusher does not produce a large amount of smalls and further reclamation of good stone from the dirt can be effected by the addition of a small supplementary screening, or washing and screening, plant if the value of the stone going to waste makes it worth while.

Secondary Crushing.

Having achieved the initial crushing and dirt elimination, all the stone should now be of a suitable size for the secondary crushing process. For this several machines, perhaps of different types, may be employed. It is often an advantage roughly to divide the product for this purpose. In such a case the dirt-eliminating screen or rumbler may be used by providing it with suitable holes in the cylinder or jackets. A heavy vibrating screen is sometimes used, but the cylindrical type is particularly suitable as it tends to even up the flow of material coming from the primary crusher, and gives an even feed to the following processes. Secondary crushing may reduce the material a step further in preparation for final crushing, or it may bring it down at once to the required size. This will depend on the tonnage that is being handled, the type of stone and market requirements. It is an axiom of quarrying that crushing should be carried out a little at a time and often. It is false economy to try too big a reduction in one machine. The type of secondary crusher may vary according to the stone and the product required. They may be similar in design to the primary machines but with the mouth opening reduced so that the ratio of reduction is not out of proportion.

The single-toggle jaw breaker or granulator, in which the swinging jaw operates by an eccentric head and is supported by a toggle plate at the lower end, is often employed, particularly in smaller installations. The machine is now generally equipped with roller-bearings, which increase its capacity and efficiency and reduce the power absorbed. Like the Blake jaw breaker, it has an advantage over other types in its ability to deal with a larger ratio of reduction and in the quality of its product. Granulating down to about 1 in. and less, it holds this advantage over all other types of crusher except the impact breaker.

The capacity of the single-toggle breaker is limited, but in a composite plant, where screening is carried out between processes, it can be employed to distinct advantage. Another type of secondary crusher which has come into favour of late years is the cone crusher, a development of the gyratory machine. Though limited in its reduction capacity, it is capable of a large output and is widely employed for secondary and final crushing. The best results are obtained when the machine is choke-fed, but the average sample of stone is not so good as that obtained with a single-toggle jaw machine.

While secondary crushing may, in many plants, be the final stage in the preparation of aggregate, some installations, by reason of their capacity, complex nature, the product required or the nature of the stone, may call for a further crushing stage.

Screening.

The production of a satisfactory sample of aggregate from breakers and crushers may be nullified by inefficient separation or screening. The screens themselves may not be at fault but may be badly chosen for the work they are intended to perform. Feed and disposal arrangements may be inadequate or the relationship of the screen holes or screen meshes may not be in balance. More and more emphasis is being directed towards the improvement of separation, sizing and cleansing of aggregate, and much research and experiment is being carried out to provide machines suitable for the conditions of work and the product required. As a result, screening machinery of one type or another is available to cover all modern requirements.

Screening and separation cover a wide field, from the elimination of dirt in primary processes to the final grading of fine aggregates. The next step, therefore, is to consider the duties which screens are called upon to perform, and to put the available equipment in proper perspective. Screens have already been mentioned in connection with dirt elimination and rough separation following primary crushing. Those of the latter class are often referred to as "rejection screens"; their prime function is to select oversized material for disposal to suitable crushers, the through material passing on for further processing. In the gravel industry heavy vibrating screens are frequently employed at the face to eliminate sand and any undersized material which may be of value in its raw state or where there is a preponderance of smalls not worth further processing. They are used here because they have not the same tendency to clog when employed on damp material as a rotary screen. Even so the screen holes may have to be varied according to the weather, since raw sand and gravel, especially when damp, present a major screening problem unless water can be used to keep the meshes clear. In the final separation process for sizing the aggregate, it is usual to employ one of the many forms of vibrating or oscillating screen now on the market, although the cylindrical screen still has many adherents, particularly where output is not large and the distributing feature of the machine is of value.

Layout of Plant.

The arrangement of crushing and screening machinery varies with each individual layout, and is largely determined by the ground and individual requirements. The primary crusher may be separated from the rest of the plant, the material from that machine being carried by a continuous belt conveyor to the main crushing and screening plant. The main plant can generally be roughly divided into secondary crushing and screening, but some screening will take place in the secondary crushing process, and some crushing may take place in the final screening section. All these processes are connected by belt conveyors or bucket elevators, and in a good arrangement the plant will be so disposed that accommodation is left for the addition of further units from time to time. In the old days a crushing plant was usually housed in one building, but nowadays the tendency is to divide the sections up, allowing plenty of room round them, and connecting them as described.

Storage facilities are always a problem in that the demand varies, so that accommodation must be found for sizes which are being produced but have no immediate sale. Where such sizes are large enough to be further reduced if required provision is usually made for drawing them back into the plant for re-crushing. Arrangements also have to be made whereby stock piles can be picked up quickly and loaded for dispatch as ordered. The modern tendency is to put these on the ground and reload with some form of mechanical shovel. A problem for the quarry-man is so to dispose of his material that it needs as little handling as possible.

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CAST CONCRETE

The Need for Small-Sized Units

THAT perhaps one of the chief building problems of to-day was the production of a relatively cheap cast concrete, because, as they all knew, good results could be obtained only with better materials and workmanship, and more efficient management, was a view expressed by SIR CHARLES MOLE, O.B.E., F.R.I.B.A., when he spoke at the recent annual meeting of the British Cast Concrete Federation. Sir Charles said that he did not know how a differentiation between the best quality of cast concrete and the lower grades could be achieved. If cast concrete could be divided into categories which could be specified, perhaps those willing to pay for the better finish would be quite sure that in inviting tenders for work they would not have competition from the lower grades. He was speaking now of the standard of finish and not the quality of durability, which should be almost constant.

On the subject of frames for multi-storey buildings, he said that in the field of cast concrete there were opportunities to-day for making a major contribution in the erection of multi-storeyed buildings by the construction of precast units, involving less labour on the site, which was always desirable. He was sure that this would repay further study on the Federation's side, and, whilst he krew that some thought was being given to this problem, he wished to say how very much he felt it necessary for them all to make a concentrated and co-ordinated effort. By that method of construction it might be possible to reduce the overall cost of building. To the structural engineers who might be present, might he say that every consideration should be given to designing units down to the lowest sizes and utilising the smallest amount of reinforcement consistent with the definite conditions laid down for the design of reinforced concrete structures?

CONDITION OF BRITAIN'S HIGHWAYS

Lord Sandhurst's Speech

THE DAY would inevitably come when Britain would be compelled to pour out fantastic sums of money on the renovation and improvement of roads that had become unserviceable for motor traffic, declared LORD SANDHURST, O.B.E., chairman of the British Road Federation, in a speech at the Federation's annual meeting, held on June 8.

Serious deterioration of British roads had already started, he said. In some parts of the country, authorities were being forced to divert money intended for general maintenance throughout the district to preventing actual physical collapse of stretches of highway. Such emergency actions could result only in an accelerating process of decay. The Government refused to accept warnings on the subject and the decay of one of our most valuable national assets was being allowed to continue unchecked.

An additional sum of £17,000,000 would restore Britain's roads to their prewar condition, yet the Government refused to spend this comparatively modest sum. Lord Sandhurst added that the motor transport industry was now paying £220,000,000 a year into the National Exchequer as a result of increased taxation and the freeing of petrol.

Council Chairman.

The new chairman of Llandudno Council is Councillor Joseph B. Jones, a local builder.

WAGE RATES

Third Stage Adjustments

ARISING from the National Joint Council for the Building Industry "Notice of Amendment of Labourers' Rates" issued on May 31, 1949, attention is called to the fact that the third stage adjustment will operate on July 3, 1950, from which date the authorised rates payable to labourers in the respective graded districts will be as under:—

NEW RATES (Per Hour)

	Labourers s. d.
London (within 12-miles circle)	2 6½
London (12-15 miles)	2 6
Grade "A" districts	2 5
Grade "A1" districts	2 4½
Grade "A2" districts	2 4
Grade "A3" districts	2 3½
Liverpool (Special)	2 6½

OFFICIAL NOTIFICATION

Imperial Pound and Yard.

The Board of Trade announces that the report on the comparisons of the Imperial Standard Yard and the Imperial Pound and the Parliamentary Copies by the National Physical Laboratory is obtainable from H.M. Stationery Office, price 1s.

These comparisons have to take place every ten years and should have been held during the war years. Among the conclusions reached by the National Physical Laboratory in their report is that the Imperial Standard Yard has been shortening at a fairly uniform rate throughout the last 52 years. It is recommended that new arrangements for defining the Yard and Pound more scientifically are much overdue.

Liverpool Centenarian.

Liverpool's oldest builder, Mr. John Morris, J.P., of Grove Park, recently celebrated his 100th birthday. He has lived in Liverpool 80 years.

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NEWS IN BRIEF

B.R.S. Digest.

The Building Research Station, Garston, Watford, Herts, have recently issued their Digest No. 18, dated May, 1950, entitled "Smoking Chimneys."

Builders' Foremen's Dance.

The Provident Institution of Builders' Foremen and Clerks of Works held their annual social and dance at St. Pancras Town Hall on May 27. There was a good attendance and members and their friends enjoyed a successful evening.

An Instructors' Course.

The Timber Development Association Instructors' Course is to take place at St. Catharine's College and Fitzwilliam House, Cambridge, from August 19-26. In view of the limited accommodation available, only instructors either actively engaged in the T.D.A. education scheme or likely to be so engaged in the 1950-51 session, can be accepted.

Fire Prevention.

Humorous captioned sketches have been used to point out the dangers of fire in the home, in the first of a series of small pamphlets being prepared and distributed by the Fire Protection Association. The Association has also drawn up some notes for the benefit of architects and builders on how they can assist in helping to prevent outbreaks of fire.

Industrial Federations Confer.

The annual conference of the directors of European industrial federations was held in London from May 23 to 26, and delegations attended from Belgium, Denmark, Finland, France, Great Britain, Holland, Italy, Luxembourg, Norway and Sweden. The conference heard with great interest the experience gained by the Anglo-American Council on Productivity as a result of various trade Teams visiting the U.S.A.

Tree Preservation Orders.

The Minister of Town and Country Planning has confirmed a Tree Preservation Order in respect of two woodland areas in the Tilford Manor Estate, Hambledon Rural District, which was recently broken up and sold by auction. The two woodland areas cover about 20 acres and stand on land rising from the River Wey and overlook the village of Tilford.

He has also confirmed an order for the trees standing in the grounds of Wotton Church, in the Leith Hill area, Dorking and Horley Rural District. These trees surround the small thirteenth-century church, which is closely associated with the diarist, John Evelyn, and form a setting of considerably beauty.

British Standards.

The British Standards Institution has recently issued the following publications:—

B.S. 1621, "Bitumen macadam with crushed rock or slag aggregate," price 2s.; B.S. 750, "Underground fire hydrants and dimensions of surface box openings," price 2s.; B.S. 1622, "Winter gritting machines," price 2s.; B.S. 1623, "Hand-rollers for road and constructional engineering," price 2s.; B.S. 1610, "Verification of Testing Machines," price 2s.

B.S. 1471, "Wrought aluminium and aluminium alloys—Tubes," price 4s.; B.S. 1473-75, "Wrought aluminium and aluminium alloys—Wire," price 5s.; B.S. 1466, "Wrought aluminium and aluminium alloys—Bars, rods and sections." price 4s.

Copies of the above can be obtained from the British Standards Institution, Sales Dept., 24, Victoria-street, S.W.1.

Operatives and Nationalisation.

A scheme for the nationalisation of the building industry, prepared by the Executive Committee of the National Federation of Building Trades Operatives on instructions given at last year's annual conference at Porthcawl, will be presented at the Federation's 33rd annual conference at Ayr this month.

Federation of Master Builders.

At the ninth annual general meeting of the Federation of Master Builders, held in London on June 6, the following officers were elected for 1950-51: President, Sir Harry R. Selley, J.P. (London); Vice-presidents, Coun. G. W. Cornelius, J.P. (Paignton), Noel Landau, B.E.M. (Merseyside), Coun. R. Colin Large (Luton), and Ald. R. W. Ricketts (London); Hon. Treasurer, Ald. H. A. Maxfield, J.P., C.C., M.I.O.B. (London).

Compulsory Purchase Orders.

The Central Land Board have made two Compulsory Purchase Orders as follows:

A plot of land of about 1,100 sq. yds. on the eastern side of Dale Wood-road, Orpington, Kent, belonging to Messrs. E. H. and A. B. Jones; and a plot of land about 1,700 sq. yds. in Amersham-road, Chalfont St. Peter, Amersham, Bucks, belonging to Miss M. B. Archer. Notice of the orders has been served on the respective owners. The Board have now made 17 Orders.

THE SCOTTISH BUILDER

NEW BUILDINGS

Edinburgh.—Plans are to be prepared for a new senior secondary school on a selected site at New Inch, and for which the architect is Mr. A. G. Forgie, F.R.I.B.A., Municipal-chbrs., Parliament-sq., High-st., Edinburgh. Est. cost, £105,000.

Glasgow.—Plans are to be prepared for new Protestant primary school at the Balarnock, Barmulloch, Robroyston scheme, for which the architects are Messrs. T. O. W. Grattan & MacLean, West Regent-st., Glasgow, W.C.2, and the quantity surveyors, Messrs. Pringle, Lockerbie & Sprout, Blythswood-chbrs., 267, West George-st., Glasgow, W.C.2.

Glasgow.—Plans are to be prepared for a new Catholic secondary school for the Priesthill district scheme, for which the architects are Messrs. Wylie, Shanke & Wylie, 140, Blythswood-st., Blythswood-sq., Glasgow, W.C.2, and the quantity surveyors, Messrs. Mathiesen & Fraser, 197, St. Vincent-st., Glasgow, W.C.2.

Glasgow.—Corporation to carry out an extension to Whitehill junior secondary school, Dennistoun, and have appointed Messrs. F. A. MacDonald & Partners, Woodside-cres., Woodlands-rd., Glasgow, W.C.3, as consultant engineers.

Glasgow.—Plans in hand for alterations and additions for Messrs. Edward MacBean & Co., Ltd., at the Willington Mills, Mary-st., Port Dundas, and for which the architects are Messrs. Campbell and A. D. Hislop, United Kingdom-chbrs., St. Vincent-st., Glasgow, W.C.2.

Glasgow.—Plans to be prepared on behalf of the Secretary of State for Scotland for the Western Regional Hospital Board, for alterations and additions about 62 to 82, West Regent-st., for which the architect is Mr. J. Morrison, 54, West Regent-st., Glasgow, W.C.2.

Glasgow.—Plans are to be prepared for Messrs. A. P. Newell & Co., Ltd., for alterations and additions at The Woodside Engineering Works, Balmore-rd., Posselpark, for which the architects are Messrs. George A. Boswell & Partners, 256, West George-st., Blythswood-sq., Glasgow, W.C.2.

Glasgow.—Plans are to be prepared for bank premises at St. George's-rd., W.C.3, for which the architect is Mr. F. Durward, Bank of Scotland architect, Head Office, Edinburgh.

Glasgow.—Plans have been partially prepared and approved for new school for site at Liddisdale-rd., Milton, area, for which the architect is Mr. John MacNab, F.R.I.B.A., 129, Bath-st., Glasgow, W.C.2.

Lanarkshire.—Plans are to be prepared for new pithead baths and other buildings which are to be erected at The Bedley Colliery, Annethill, and for which the architect is Mr. James Allan, F.R.I.B.A., 56, Palmerston-pl., West End, Edinburgh.

Lanarkshire.—Plans are to be prepared for the new "Murray School" which is to be erected at an estimated cost of £145,000 on a selected site at East Kilbride, and for which the architect is Mr. William Watt, F.R.I.B.A., Albert-rd., Motherwell-Wishaw.

Lanarkshire.—Plans are to be prepared for new housing scheme of 55 houses, etc., which are to be erected at a selected site at Tannockside, and for which the architect is Mr. Samuel MacColl, F.R.I.B.A., County-chbrs., Beckford-st., Hamilton.

West Lothian.—School at Greengairs, Harthill, for C.C. G. P. Booth (F.), County A. and Master of Works, West Lothian-bldgs., Linlithgow. Orlit, Ltd., General Contractors, Edinburgh. (Est. cost, £97,000.)

FUTURE CONSTRUCTION

PUBLIC APPOINTMENTS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

JUNE 23.

†***Bristol T.C.**—Primary school at Oldbury Court. City A., Eagle House, Colston-ave. Dep. £2 2s.

†***Wellington U.D.C.**—10 houses, Bennett's Bank. E. & S. Dep. £2 2s. Tenders by July 15.

***Wenlock T.C.**—16 houses at New-rd., Broseley. J. Brian Cooper, F., Coleridge-chbrs., 177, Corporation-st., Birmingham 4.

JUNE 24.

†***Essex C.C.**—Reinstatement of war damage at Hornchurch North-st. primary and infants' schools. County A.

†***Essex C.C.**—Restoration of facade, etc., Clarence House, Thaxted. County A.

†***Essex C.C.**—Hostel for aged people, Brentwood. County A.

†***Essex C.C.**—Hostel for aged people, Woodford. County A.

***Essex C.C.**—Roofing repairs, Brentwood secondary school. County A.

†***Upholland U.D.C.**—12 houses, Highgate housing estate. Gornall, Kelly & Shelton, architects, 8, Hardshaw-st., St. Helens. Dep. £2 2s. Tenders by July 17.

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***Lincoln T.C.**—Adaptation and additions to Roseland children's home, Scothern. City A., Stamp End. Dep. £3 3s.

***Middlesex C.C.**—Conversion of 76, Marlborough-hill, Wealdstone, to dental clinic. County A., 10, Gt. George-st., S.W.1. Dep. £2.

†***Newcastle-under-Lyme Borough.** — Fifty houses. C. J. Morton, Town Clerk.

†***Samford R.D.C.**—24 Airey houses, Brantham. Johns & Slaker, architects, 32, Foundation-st., Ipswich.

Stockton-on-Tees B.C.—Erection of 54 bungalows on land north of Darlington-la. and east of Durham-rd. in the following contracts: Section 1, 14 bungalows: section 2, 10 bungalows; section 3, 30 bungalows. Boro' A., 28, The Square, Stockton-on-Tees. Dep. £2 2s. for either the whole of the work or separate sections.

†***Willesden B.C.**—List of approved contractors. J. C. Morris, B.E. & S.

JUNE 27.

Beverley R.D.C.—Erection of 10 houses at Skidby. G. Palfreyman, E.S. & Arch., 36, Market-pl., Beverley. Dep. £1 1s.

***Cannock U.D.C.**—Maintenance shops, stores and offices, The Hills depot. E. Lomax, E. & S. Dep. £2 2s.

†***Northants C.C.**—Extension at Oundle fire station. County A., County Hall.

JUNE 28.

†***Hampshire Police Authority.**—Police house at Fore-st., New Milton, and one at Shipton Bellinger. County A., The Castle, Winchester. Dep. £1 1s. each.

†***Ipswich C.B.**—Six shops and flats at Whitton White House estate. B.S., 19, Tower-st. Dep. £3 3s.

JUNE 30.

†***Cornwall C.C.**—Infants' school, Trenance site, Newquay. S. Gregson, F., County A., Truro. Dep. £3 3s.

†***Greenwich B.C.**—136 flats at Cherry Orchard site, Charlton. B.E. & S., Town Hall.

JULY 1.

Castle Ward (Northumb.) R.D.C.—Erection of 26 houses at Stamfordham. J. Bolton, B. & S., 7, North-rd., Ponteland. Dep. £2 2s.

Dolgelley U.D.C.—Construction of (a) 20 permanent houses, and (b) site works, roads and sewers, on the Froheulog site, Arran-rd. Clerk's Office, Bridge-st., Dolgelley. Dep. £5.

JULY 3.

Battle R.D.C.—Erection of 10 houses at Bishop's-la., Robertsbridge. A. H. Neave, architect, 36, Mount-st., Battle. Dep. £2 2s.

Beverley R.D.C.—Erection of 10 houses at Ellerker. G. Palfreyman, E.S. & Arch., 36, Market-pl., Beverley. Dep. £1 1s.

***Rawmarsh U.D.C.**—34 houses, Monkwood estate. J. R. S. Creighton, S. Dep. £5.

***Tamworth T.C.**—50 houses, Fazeley-rd. H. F. Bruce Smith, B.E. & S.

***Wokingham R.D.C.**—10 houses, Cricket Hill, Finchampstead. Eric G. V. Hives, L., 3, Cork-st., Reading. Dep. £2 2s.

JULY 4.

Brighton T.C.—Erection of 17 houses on the Parkside estate, Coldean. D. J. Howe, B.E. & S., 26-30, King's-rd., Brighton. Dep. £2 2s.

***Merton and Morden U.D.C.**—Public convenience at Kingston-rd. E. & S., Morden Hall.

JULY 5.

Long Eaton (Notts) U.D.C.—Erection of 12 bungalows on scheme No. 180, Wilsthorpe-rd. Francis Turner, E. & S., Town Hall, Long Eaton. Dep. £2 2s.

Morecambe and Heysham B.C.—Erection of 14 C.1 type houses at Blackberry Hall estate. Boro' S. Dep. £1.

***Watford R.D.C.**—Six houses, Downer-dr., Sarratt. S. A. Nicholson, C. Dep. £1 1s.

JULY 7.

Harrow U.D.C.—Reconstruction and adaptation of "West House," West End-la., Pinner. H. W. Rackham, F.R.I.C.S., E. & S., Council Offices, Stanmore. Dep. £2 2s.

JULY 10.

***Hove T.C.**—Six shops with flats over and 16 garages, Sunninghill. T. R. Humble, B.S. Dep. £3 3s.

Northamptonshire C.C. — Reconstruction of Hands Canal bridge. County S., County Offices, Guildhall-rd., Northampton. Dep £2.

***Salford T.C.**—Two additional classrooms at Tootal-dr. primary school. City E., Town Hall. Dep. £1 1s.

***Stretford T.C.**—36 flats at Railway-rd. site. B.S., Town Hall. Dep. £2 2s.

JULY 11.

***Bournemouth C.B.**—11 houses, Kinson. Boro' A. Dep. £2 2s.

JULY 13.

***East Retford R.D.C.**—24 houses at Sutton with road and sewage works, etc. R. L. Gay, C., Council Offices, Amcott House. Dep. £5 5s.

JULY 14.

***Derby C.B.**—(a) 21 aged persons' bungalows at Wyndham-st., and (b) 19 aged persons' bungalows at Chaddesden Hall site. Thos. W. East (F.), Boro' A., Council House. Dep. £2 2s. each set.

JULY 17.

***Smethwick C.B.**—Infants' school, Hamilton-rd. R. Fletcher, B.E. & S. Dep. £2 2s.

***Southport C.B.**—Structural alterations at 124-126, Manchester-rd. B.E., Town Hall.

***Weymouth and Melcombe Regis T.C.**—54 houses at Rylands-la. estate. B.E. & S., 6, Pulteney-bldgs. Dep. £2 2s.

JULY 26.

***Glasgow Corporation.**—267 flats at Berryknowes-rd. Director of Housing, 2nd Floor, 20, Trongate. Dep. £5 5s. (amended advertisement).

NO DATE.

***East Anglian Regional Hospital Board.**—Approved list of contractors for building works. K. V. F. Morton, secretary, 117, Chesterton-rd., Cambridge.

***East Anglian Regional Hospital Board.**—Approved list of contractors for engineering services. K. V. F. Morton, secretary, 117, Chesterton-rd., Cambridge.

***Romford T.C.**—24 flats. J. W. Hammond, architects and surveyors, 20, North-st. Dep. £2 2s.

PAINTING, ELECTRIC LIGHTING, MATERIALS, ETC.

JUNE 24.

***Bath T.C.**—Redecoration of Pump Room. T.C. Dep. £1 1s.

†***Essex C.C.**—Internal decorations at Tilbury St. Chad's secondary school. County A.

JUNE 29.

***Worcester T.C.**—Redecoration of certain schools. City E. & S., 22, Bridge-st. Dep. £2 2s.

JULY 3.

Bucks C.C.—Painting of a number of bridges in the county. County S., County Offices, Aylesbury. Dep. £2 each contract.

JULY 12.

***St. Marylebone B.C.**—Redecoration, repainting and repairs of requisitioned properties. A. L. Downey, B.E. & S. Dep. £2 2s.

ROADS, SEWERAGE AND WATER WORKS

JUNE 24.

Swinton and Pendlebury B.C.—Provision and laying of about 13,000 sq. yds. of two-course hot-rolled asphalt on Manchester-Chorley A.6 road. E. & S., Town Hall, Swinton, Lancs. Dep. £2

JUNE 28.

New Sarum T.C.—Construction of carriageways, footways and surface water sewer. H. Rackham, City E., Council House, Bourne, Salisbury. Dep. £2 2s.

JUNE 30.

Bristol C.C.—Construction of roads and sewers on the Dundry housing site, first section. J. B. Bennett, M.Inst.C.E., M.I.Mun.E., City E., Arno's Court, 470, Bath-rd., Brislington, Bristol, 4. Dep. £2 2s.

JULY 6.

Reading C.B.—Construction of footways at verges at Buckingham-dr. B.S., Town Hall, Reading. Dep. £2 2s.

Winchester T.C.—Laying of sewers and construction of r.c. carriageway and also footpaths on Weeks estate. City E., Guildhall, Winchester. Dep. £2 2s.

JULY 7.

***Halstead U.D.C.**—Roads and sewers at Park Fields estate. A. E. Wiseman, 10, Duke-st., Chelmsford. Dep. £3 3s.

AUGUST 11.

Blyth R.D.C.—Laying of about 5½ miles of asbestos cement mains in parish of Parham and surrounding area. Messrs. Binnie, Deacon and Gourley, engineers, Artillery House, Artillery-row, Westminster, S.W.1. Dep. £5.

GENERAL BUILDING WORK (LONDON)

Chelsea.—FLATS, SHOPS, ETC.—L.C.C. has withdrawn claim to use part of Lucan-pl. site for nursery school, and B.C.'s Architects' Dept. is preparing plans for its redevelopment by erection of about 48 flats with shops and, possibly, studios.

Chelsea.—FLATS.—B.C. still awaits confirmation of compulsory P.O. made in 1946 in respect of site in Hortensia-rd. About 24 flats are proposed to plans by B.C.'s Architects' Dept.

Chelsea.—CONVERSION WORK.—B.C.'s Architects' Dept. is preparing plans for conversion of existing properties at Elm Park-gdns. into flats.

Islington.—FLATS.—Tenders are shortly to be invited for 24 flats on Queen Margaret's-gr. site. Plans by Messrs. E. C. P. Monson, F.R.I.B.A., 120, Moorgate, E.C.2.

Old Kent-road.—FLATS.—City Corpn. approved scheme prepared by Mr. Starling, City Engineer's Dept., 55, Moorgate, E.C.2, for 46 flats on part of Bridge House estate. Est. cost, £90,000.

West Ham.—SITE FOR SCHOOL.—B.C. propose nursery school in Freemasons-rd. and Leslie-rd. area. No plans yet formulated.

"THE BUILDER" PRICES

ZINC

The Ministry of Supply announces that from June 13, the price of good ordinary brand zinc is increased by £4 from £123 10s. to £127 10s. per ton delivered. Prices of other grades are varied accordingly. The zinc oxide manufacturers also announce that from June 13 the prices of zinc oxide, in lots of not less than 2 tons, delivered buyers' premises, are increased by £3 10s., as follows :

	New Price	*Old Price*
Red Seal	£119 0s.	£115 10s.
Green Seal	£120 10s.	£117 0s.
White Seal	£121 10s.	£118 0s.

BRASS TUBES

The Brass and Copper Tube Association announce that in consequence of the increase in the controlled price of zinc which came into operation on June 13, the basis price of brass tubes is increased forthwith by ¼d. per lb. to 19¼d. per lb. The list prices of brass and aluminium brass ferrules are also increased by ¼d. per lb.

STONE

The Bath and Portland Stone Firms, Ltd., announce in a letter dated June 13 that owing to the recent advance in railway rates, the following revised prices now apply in stone delivered on rail in London :

BATH STONE

Monks Park stone	5s. 7d. per ft. cu.
Box ground stone	6s. 7d. per ft. cu.
(Delivered at South Lambeth Station.)	

Whitbed Portland stone 6s. 4½d. per ft. cu.
(Delivered at Nine Elms Station.)

(PROVINCIAL)

Alnwick.—Convent High School for Girls is proposed at £40,000. Architects, Keavell & Cahill, Lloyds Bank-chbrs., Alnwick, Northumberland.

Atherton.—U.D.C. approved erection of 46 houses at Hag Fold estate. Surveyor, F. L. Boydell.

Bakewell.—U.D.C. propose houses and bungalows for aged adjoining Burton-close estate. Architect, A. Lowcock, Bakewell.

Bangor.—University Authorities propose extensions at main university block and at science buildings on Deiniol-rd., along Tanrallt and Glanrafon.—M.O.W. propose engineering depot and garage at Wern Fields for G.P.O. and extensions to G.P.O. buildings on car park site, also a large administrative block at junction of High-st. and Glynne-rd.

Beaumaris.—T.C. seek loan of £6,550 for improvements to pier.

Belper.—R.D.C. to invite tenders for 51 houses at Chapel-st., Kilburn.—Propose 30 houses at Crich.

Buxton. — British Rheumatic Association Homes, Ltd., propose purchase and adaptation at about £30,000 of St. Ann's Hotel.

Cheshire.—E.C. received M.O.E. approval for erection of Grange County Junior School at Runcorn. F. M. Parkes, County A.—C.C. approved further building work at New County Offices at £12,000.

Chester.—R.D.C. received M.O.H. approval for 2 blocks of 8 flats at Caughall-rd. site Surveyor, C. Bridge.

Chesterfield.—Staff accommodation proposed at Old-rd. Prim. and Whittington Prim. Schools. Architects, Wilcockson and Cutts, 12, Saltergate, Chesterfield.

Cockermouth.—R.D.C. has been asked by Camerton Parish Council to build 24 houses in Camerton area.

Corby.—T.C. approved lay-out plans for 75 houses at Forest Gate site.

Coventry.—R.C. Authorities propose new prim. school at Penny Park-la., Holbrooks.

Doncaster.—B.C. approved plans for extensions to laboratory block at Churchill-rd. for K. Thelwall, Ltd.; baling press shop at Wheatly Hall-rd. for British Bemberg, Ltd.

Droitwich.—T.C. preparing plans for large estate at St. Peters-cres.

Earl Sterndale.—C. of E. Authorities propose rebuilding of 14th-century church of St. Michael and All Angels at £8,000.

Heanor.—U.D.C. approved additional classrooms at Heanor Commonside Infants' School for Derbyshire E.C.—Licence of £18,000 received by trustees for rebuilding of All Saints' Church, Marlpool.

Hereford.—T.C. approved plans for cowhouse at Prospect Farm, Folly-la., for R. Skerrett. Architects, C. T. Bishop & Son, Council House, Marden.—Office block at Mortimer-rd. for Painter Bros., Ltd. Architects, Scriven, Powell and James, Hereford.—T.C. to negotiate with S. C. Jewell, 214, Ross-rd., for houses at Gamecock estate.

Kenilworth.—U.D.C. hope to commence development of square this year.

Lancs.—E.C. approved plans and estimates of £181,570 for Maghull Ormonde-dr. Mixed Sec. School; £64,190 for Leyland Earnshaw Bridge Junior School.—Approved following short list programme for 1951 :—

Phase 1, rebuilding of Prescot R.C. (St. Luke's Department); phase 1 of Huyton with Roby Brookhouse-st., St. Aidan's R.C.; phase 1 of Middleton Bowlee County School; phase 1 of Urmston Highfield County; erection of Worsley Mount Skip County and Swinton and Pendlebury, Stanwell-rd. R.C. Sec. Mod.; phase 2 of Chadderton Yew Tree County; phase 1 of Failsworth Girls' County Sec. Mod.; phase 1 of Widnes, Ditchfield New-rd. County; phase 2 of Lancaster and Morecambe Tech. Coll.; phase 2 of Ashton-under-Lyne Heginbottom Tech. College. Total estimated cost, £607,000.

Approved additional classrooms at following schools and included in 1960 programme :—Penwortham Junior and Infant County; Chorley, Duke-st. County; Leigh, Plank-la. Methodist; Prestwich, The Heys Sec. Mod.; Middleton, Alkrington County; Middleton, Boarshaw Junior and Infant County; Widnes Wade Deacon Grammar; Ulverston, Dale-st. County.

Lancaster, Skerton Infant and Junior County; Lancaster, Ryelands County; Morecambe and Heysham, Lancaster-rd. County; Fleetwood Grammar; Fulwood; Watling-st. County; Waterloo Park Girls; Newton-le-Willows Sec. Mod.; Worsley Walkden Sec. Mod.; Chadderton Grammar; Denton West End Junior and Infants' County. County A., G. Noel Hill.

Lancs.—Caretaker's lodge and sports pavilion proposed at Knowsley Park as memorial to Lord Derby. Earl Peel opened appeal.

Leeds.—E.C. seek loan sanction for £212,500 for Spen-la. Sec. Mod. School.

Leek.—R.D.C. approved layout for 20 houses at Longnor site.

Liverpool.—Housing Com. approved layout for a scheme at Croxteth which will cover 135 acres and eventually accommodate 2,400 houses and flats. Scheme also provides for churches, schools, day nurseries, public library, public offices, etc.

Lymm.—U.D.C. propose 32 houses, Sandy-la. site. Surveyor, J. R. Dobson.

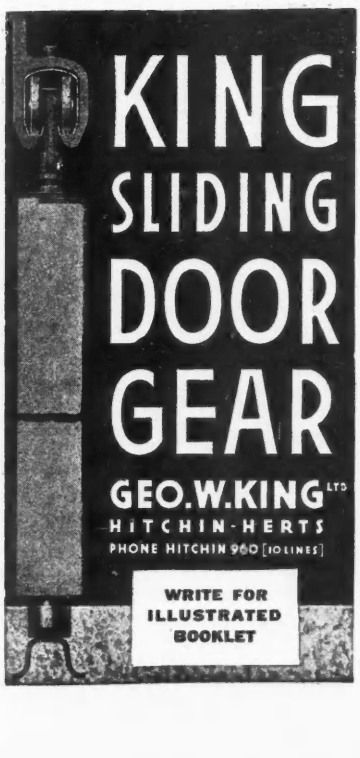
Macclesfield.—T.C. propose further 334 houses, Ivy-rd. estate, and 254 at Hurdsfield. Boro' A., E. A. Heppenstall.

Manchester. — Jewish Authorities propose transfer of "Great Synagogue" from Cheetham Hill to Kersal at £50,000. Secretary, J. G. Schwalbe.

Middlesbrough.—Boro' E. (J. A. Kenyon) has prepared plans for 20 houses at Saltersgill and 31 in Glendale-rd. for T.C. No contracts let.

Milnrow.—U.D.C. propose erection of 50 flats at Dalton-ave.

Newcastle-on-Tyne.—Revised plans have been prepared by Wilson & Wilson, 90, Pilgrim-st., Newcastle, for six houses in Ilfracombe-ave., etc., for J. McEwan, builder, 20, Croftway, Newcastle-on-Tyne.—S. J. Stephenson & Gillis, 2, Saville-pl., Newcastle-on-Tyne, are architects for alterations to canteen, sanitary accommodation and offices in Shields-rd. for Cut-Out, Ltd.,



boxmakers.—Plans have been approved for 12 shops and residential flats and eight garages at The Crossway for City Council. Plans by City A., 18, Cloth Market, Newcastle.

Contract will be let shortly by City Council for 15 old people's houses, Stamfordham-rd., on Blakelaw estate.—T.P. Com. approved proposals for R.C. school at The Fossway. Private architect likely to be employed. Project is still in early stages.—Messrs. C. A. Parsons & Co., Ltd., electrical plant manufacturers, Shields-rd., Newcastle, to carry out large scheme for research and design building. Work likely to start early next year.

Northallerton.—Local War Memorial Com. to acquire three acres for swimming bath and hall to cost £25,000.

Northampton.—R.D.C. propose following houses: Billing 6, Bradfield 6, Bugbrook 6, Cogenhoe 6, Kislingbury 4, Wootton 10 and Yardley Hastings 6. Surveyor, R. J. Miller.

North Riding.—Ed. Com. decided to build county prim. school at Haxley. Plans by County A., County Hall, Northallerton.

North Riding.—Ed. Com. have approved plans for sec. school at Ryedale. Plans by County A. County Hall, Northallerton.

Norton.—C. of E. Authorities propose church hall at £7,500.

Oswaldtwistle.—U.D.C. to invite tenders shortly for further housing scheme, Trinity-st. site.

Otley.—T.C. approved plans for:—Alterations to offices at Beech Hill for Yorks Electricity Board.—Alterations at Inglewood, Bradford-rd., for West Riding C.C.

Rugby.—B.C. approved plans for:—Service garage and showrooms, Lawford-rd. (south side), for S. H. Newsome & Co., Ltd., Corporation-st., Coventry.—Printing works, offices, etc., at rear of 126-152, Hillmorton-rd., for Jolly and Barber, Ltd., King Edward-rd.

Salford.—Governors of Cassel Fox School propose new school.

South Shields.—T.C. agreed to lease site on Marsden-rd. estate for proposed working men's club.—30 acres to be reserved on Coast-rd. for proposed sec. mod. school. Sites are also to be reserved on Simonside and Whiteleas estates for new schools.—British Arc Welding Co., Ltd., Wapping-st., South Shields, are seeking site for workshops.

Alterations proposed to shop premises, King-st., for Montague Burton, Ltd., Hudson-rd. Mills, Leeds. Plans are by the firm's own architect.—J. M. Angus, Hanover-sq., Newcastle-on-Tyne, is architect for alterations to South Shields Social Club, Victoria-rd.—Plans are being prepared by J. H. Morton & Son, Martins Bank-chbrs., Fowler-t., South Shields, for Congregational Church in Moor-la. for Durham and Northumberland Congregational Union.

Page, Son & Hill, 75, King-st., South Shields, are architects for hotel in Bamburgh-ave. for Lorimer & Clarke, Ltd.—J. W. Hanson & Son, 123, Northumberland-st., Newcastle-on-Tyne, are architects for alterations in Nile-st. for W. Duncan, Ltd., provision merchants.—Plans are being prepared by R. Collins, Russell-bldgs., King-st., South Shields, for laundry in Templetown.—Durham Coal Board to erect workshop at Westoe Colliery.—G. R. Smith & Partners, Winchester-st., South Shields, are architects for proposed houses in King George-rd. and West-ave. for J. W. Ridley, builder, South Shields.

Stafford.—T.C. approved details of housing scheme at proposed Manor estate, including 300 houses, cinema, hall and extensions to existing school.

Sunderland.—T.C. received approval in principle to scheme for a hostel for old people at Thorney-cl. at £15,000. Boro' Surveyor, J. E. Lewis.

Todmorden.—West Riding C.C. propose 16 houses. Plans by County A., H. Bennett, Wakefield.

Tynemouth.—Boro' E., 19, Howard-st., North Shields, to prepare layout for houses between Whitehouse-la. and Rake-la.—Question of building houses in vicinity of Moorhouses and Chirton Grange reservoirs is also being considered.—T.C. received sanction to borrow £12,923 for police houses at Marden. Plans have been prepared by W. Stockdale, Howard-st., North Shields, for 16 flats in Biddlestone-cres. for J. G. Thompson & Sons (Contractors), Ltd., 28, Fowler-st., South Shields.

Plans by G. H. Gray, Camden-st., North Shields, for extending Collingwood Junior and Infant School for E.C. have been approved.—Tasker & Child, architects, Trinity-bldgs., 25, New Bridge-st., Newcastle-on-Tyne, have been appointed local agents for Dr. C. Holden, consultant architect (London), who is reporting to Tynemouth T.C. on development of East End and central areas of North Shields.—London and Newcastle Tea Co., St. James-st., Newcastle-on-Tyne, to build grocery shop near Coast-rd.

Walton-le-Dale.—U.D.C. propose conversion of Bamber Bridge Teachers' Training College into living accommodation.

Warrington.—B.C. propose shops at Dallam Farm estate.

Whitley Bay.—Further 32 houses to be built by U.D.C. in Cotswold-ave. on Foxhunters' site.—Surveyor (E. Roberts), Council Offices, Whitley Bay, has prepared plans for a further 18 houses at Seaton Sluice between Beresford-rd. and The Crescent.—U.D.C. is urging Min. of Transport to approve the reconstruction of Marden Bridge.

Wigan.—Corpn. to consider scheme for housing development of 330 acres estate in Worsley Mesnes area.

Worcs.—C.C. approved plans for adaptations at "The Mere," Stourbridge, for reception centre for children.

Workington.—B.C. to invite John Laing & Sons, Ltd., Carlisle, to submit tender for "Easiform" houses, adjoining Lavercock Hall. Approved plans for:—Additional offices at gas works, for Northern Gas Board.—Extension to existing engineering division building at Moss Bay, for United Steel Co.'s Workington iron and steel branch.

TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government Departments*.

Ashton-in-Makerfield.—62 houses at Bryn Station site, for U.D.C.: *Direct Labour, £69,676.

Derby.—Two pairs of fire brigade houses, Chaddesden Hall estate, for C.B. T. W. East (F.), Boro' A.: *Mr. R. A. Wheeldon, Slack-la., Brailsford, Derby, £5,580.

Derby.—Police houses, etc., Eden-rd., Chaddesden, and Chaddesden Hall estate, for C.B. Thos. W. East (F.), Boro' A.: *Borough Building Dept., 839, London-rd., Derby, £3,820; *H. J. Warner, Ltd., Station-rd. Works, Mickleover, Derby, £6,245.

Glasgow.—New classrooms at St. George's school. *Thomas Henderson & Sons (Glasgow), Ltd., Glasgow, £5,235. Temporary school buildings at North Langton-rd., Pollock estate, £9,115; annexe at Overton North, Priesthill, £9,400; and annexe at Overton South, Priesthill, £8,960; *Messrs. Cowieson, Ltd., St. Rollox, Glasgow. At Drumberg-dr., Priesthill, annexe for Levern school, £7,280, *Thomas Henderson & Sons (Glasgow), Ltd., Glasgow.

Glendale.—Erection of eight houses at Millfield, for R.D.C.: *R. Carse & Sons, Amble, £12,300.

Kearsley.—24 cottage flats with sewerage and roadworks on the Singing Clough site, for U.D.C. E. C. Kirk, E. & S., Town Hall, Kearsley, Farnworth:—

J. Davies, Kearsley	£28,067
H. Wimpenny & Sons, Ltd., Prestwich	27,287
C. Topham & Sons, Eccles	26,360
E. Tonge & Sons, Ltd., Swinton	25,386
E. & S. Street, Ltd., Kearsley	24,707
*C. Musker Bros., Ltd., Swinton	24,609

(Subject to M.O.H. approval.)

Lincoln.—Eight shops, five flats and eight maisonettes at Boultham Moor North estate, for T.C. P. F. Burridge, F.R.I.B.A., City A., Stamp End, Lincoln. Quantities by A. E. Thornton-Firkin & Partners, 10, Mint-st., Lincoln: *Hunt Lea Estates, Ltd., 180a, Boultham Park-rd., Lincoln, £35,125.

Liverpool.—72 flats in Edge Lane-dr.: *F. C. Bloomfield & Co., Ltd., £107,449.

L.C.C.—The undermentioned contracts exceeding £2,500 in value have been placed by the L.C.C. during the period ended June 6:—

Laying out of gardens at Mayville estate, Islington, Sunley's (London), Ltd. Cleaning and painting at Colville primary school, Kensington, Drury & Co., Ltd. Cleaning and painting at Clapton county school, Hackney, Boss & Brady, Ltd.

Cleaning and painting at Alma junior school, Bermondsey, Pugett Construction Co., Ltd. Cleaning and painting at Walworth secondary school, Southwark, Drury & Co., Ltd. Erection of Hurlingham and Putney Park-la. schools, M. J. Gleeson, Ltd. Cleaning and painting at Holden-st. school, Battersea, Howe & White, Ltd. Cleaning and painting at Haseltin-rd. school, Lewisham, M. J. Deane. Cleaning and painting at Millbrook-rd. school, Wandsworth, Drury & Co., Ltd. Cleaning and painting at Joseph Lancaster school, Southwark, Harris (Brockley Builders), Ltd. Cleaning and painting at Hanley school, Islington, C. & T. Painters, Ltd. Erection of six blocks of flats on the Bandon-rd. site, Bethnal Green, Lavender, McMillan, Ltd. Construction of blocks 1, 3, 4, 6 and 7 of flats and other work on Housing Site 1, in Lansbury, Stepney-Poplar Reconstruction area, Tersons, Ltd.

¶London (Admiralty).—Particulars of contracts placed by Civil Engineer-in-Chief's Department, Admiralty:—

Rosyth: Dismantling dolphins and gangways, James A. White, St. Davids, by Dunfermline.

¶London (Air Ministry).—List of new contracts to the value of £500 or over for the weeks ended May 27 and June 3:—

Building and hutting: Walter Lawrence & Son, Ltd., Swaffham, Norfolk. *Maintenance work*: William Sindall, Cambridge. *Building*: W. Llewellyn & Sons, Ltd., Queen Victoria-st., London, E.C.4.

Painting: T. & G. Saxton, Mansfield Woodhouse, Notts; Donald Humberstone & Co., Ltd., North Somercotes, Louth, Lincs; Downing Rudman & Bent, Ltd., Chippenham, Wilts. *Replastering*: Lewis & Watters, Leamington Spa.

¶London (M.O.W.).—Contracts placed by M.O.W. for week ended June 3:—

Berkshire: M.O.F. Slaughterhouse, Chorlsey, Rebuilding, Boshers (Chorlsey), Reading-rd., Chorlsey; Aldermaston, Erection of M.O.L. employment office, A. J. Sapp & Son, 5, Hackwood-rd., Basingstoke, Hants. *Essex*: 499 & 501, Sale-st., Becontree, Erection of new branch post office, J. & J. Dean, Ltd., Ruckhalt Works, Ruckhalt-rd., E.10.

Hampshire: East Stratton, Erection of two pairs of Forestry Commission houses, W. H. Crispe & Son, Medstead, Alton. *Lancashire*: Swinton telephone exchange, Extension, J. Gerrard & Sons, Ltd., Swinton, Manchester; Prestwick telephone exchange, Extension, P. Hamer, Ltd., Park-st., Swinton.

Midlothian: Saughton, Edinburgh, Erection of temporary office building, Jas. Miller & Ptnrs., Ltd., 18, George-st., Edinburgh.

¶London (War Dept.).—Works contracts placed by War Dept. for week ended June 3:—

London: Painting work, Fields, Ltd., London. *Cheshire*: Road work, Bituminous Surfacing, Ltd., Manchester. *Lancs*: Miscellaneous work, Edmondson Bros. (Morecambe, 1948), Ltd., Morecambe.

Leics: Painting and decorating work, Donald Humberstone & Co., Ltd., Louth. *Derbyshire*: Painting and decorating work, Harold G. Oates, Ltd., Bradford. *Northants*: Miscellaneous work, Frederick Lack, Ltd., Northampton.

Berks: Road work, Constable Hart & Co., Ltd., Westminster. *Hants*: Building work, W. G. Sheppard (Builders), Ltd., Guildford. *Wilts*: Miscellaneous work, A. J. Dunning & Sons (Weyhill), Ltd., Weyhill.

Manchester.—Rebuilding of three-storey premises at Miller-st., for Baxendale & Co., Ltd.: *Matthews & Mumby, Ltd., Stockport-rd., Manchester.

Newcastle.—New frontages to the premises of St. Andrew's Motors, Gallowgate, Newcastle. Architects, L. J. Couves & Partners, Carliol House, Newcastle: *J. K. Rutherford & Sons, Jesmond-rd., Newcastle.

Newcastle-on-Tyne.—Conversion of Myrtle Cottage into a hostel for old people: *R. S. Appleby & Co., 15, Trafalgar-st., Newcastle.

Newcastle-on-Tyne.—Erection of 39 houses on Victoria-av. site of Longbenton estate, for C.C. George Kenyon, City A., 18, Cloth Market, Newcastle-on-Tyne 1: *Wm. Leech (Builders), Ltd., 2, Clayton-st., Newcastle, £45,921.

Newcastle-on-Tyne.—Erection of 11 aged people's dwellings on Montague estate (section A), for C.C. George Kenyon, City A., 18, Cloth Market, Newcastle-on-Tyne 1: *J. H. Fisher (Newcastle), Ltd., Kenton-la., Newcastle 3, £9,720.

Newcastle-upon-Tyne.—Erection of houses on Montagu estate, for C.C., as follows: (a) 16 aged people's dwellings on section "B." and (b) 158 houses on section "D." George Kenyon, City A., 18, Cloth Market, Newcastle-upon-

WATerloo 6314 (6 lines)

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Tyne 1. (a): *J. H. Fisher (Newcastle), Ltd., Kenton-la., Newcastle 3, £14,130; (b): *Wm. Leech (Builders), Ltd., 2, Clayton-st., Newcastle-on-Tyne, £188,769.

Nottingham.—Assembly hall at Wigman-rd. infants' school, for E.C.: *J. W. Stamp & Co., Bobbers Mill, Nottingham.

Oswestry.—Primary school, for Salop E.C.: *T. Lowe & Sons, Ltd., Stoke-on-Trent, £38,375.

Plymouth.—Infants' school, Ernesettle, for T.C. Louis de Soissons, A.R.A., & Partners, 11, The Crescent. Quantities by Smith & Bowl, Plymouth: *John Garrett & Son, Ltd., Embankment-la., Prince Rock, Plymouth, £51,139.

Richmond (Yorks).—Erection of 12 houses at St. Martin's, for R.D.C.: *Boddy & Bell, Thomas-st., Darlington.

Rochdale.—Grammar School for Boys at Balderstone, for C.B.: *E. Taylor & Co., Ltd., Ebor-st. Saw Mills, Littleborough.

Salford.—Erection of St. Joseph's R.C. infants' school: *E. B. Jones & Rawlinson, Ltd., Salford, £44,247.

Seisdon.—30 houses, Moat Brook-av., Codsall, for R.D.C. F. Bagley, A.M.Inst.C.E., M.I.Mun.E., S. Quantities by Oswald A. Wainwright, F.R.I.C.S. *Geo. Wright & Co. (Wolverhampton), Ltd., 10, Union Mill-st., Wolverhampton, £41,000.

Stamford (Lincs).—54 houses at Drift-rd. estate, for U.D.C.: *Morton Potteries, Ltd., Leicester, £71,764.

Staveley.—72 houses at Inkersall, for U.D.C.: *J. A. Belpitt & Co., Ltd., Sheffield, £101,983.

Stockton-on-Tees.—Extension to factory at North Tees, for Horsfall, Garnett & Co., Ltd. Architects, Douglas Crawford & Ellis, 10, Market-pl., Bishop Auckland: G. Dougill & Sons, Chestnut-st., Darlington.

West Ham.—36 flats at West-rd. and Park-rd., for C.B. Thomas E. North (F.), Bero' A. and Planning Officer, 70, West Ham-la., E.15. Quantities by J. A. Burrell, F.R.I.C.S., 7, Grays Inn-sq., W.C.1:—

Unera Construction Co., Ltd., W.14	£62,998
F. Troy & Co., Ltd., S.E.1	61,876
W. J. Cearns, Ltd., E.15	61,763
J. & R. Rooff, Ltd., E.13	61,223
Hammond & Miles, Ltd., Essex	59,465
Gratton Wilson, Ltd., E.15	57,790
Horn Construction Co., Ltd., E.C.2	56,729
Jenners (Builders), Ltd., Essex	56,007
Mansfield & Nek, Ltd., E.C.3	55,714
Geo. Moss & Sons, Ltd., Middlesex	55,581
H. C. Horswill, Ltd., E.7	55,462
Corporation Works Dept. (West Ham), E.15	56,400
Geo. Hudson & Co. (Builders), Ltd., E.18	54,026
J. & J. Dean, Ltd., E.10	53,926
Wm. J. Jerram, Ltd., E.6	53,787
*F. J. Coxhead & Co. (Leytonstone), Ltd., E.15	53,564

Whitley Bay.—Erection of 10 houses for U.D.C. E. Roberts, U.D.C. Surveyor: *Castles, Closefield-gr., Whitley Bay.

Whitley Bay.—Erection of 12 houses at Southward, Seaton Sluice, for U.D.C. E. Roberts, S.: *Rockcliffe Building Co., Park View, Whitley Bay.

Wisbech.—42 houses, Bath-rd. housing estate, for B.C. Gordon J. Wootton, B.E. & S.: *J. Campion & Son, 2, Station-st., Holbeach, £37,089 (30 houses); *T. J. Jupp & Sons, Ltd., 18, Burdett-rd., Wisbech, £15,239 (12 houses).

Workington.—126 houses at Northside site, for B.C.: *John Laing & Sons, Ltd. (subject to M.O.H. approval).

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